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The growth of the program for the gifted in all of Chicago's public schools is analyzed with respect to special methods, curriculums, cultural demonstration centers, guidance services, school-community cooperation, teachers, and progress in providing for the gifted. It is indicated that a well-defined, comprehensive plan of education for the gifted has evolved in the Chicago public schools, that identification and selection procedures are broadly conceived and well-organized, that curriculum adaptation has taken place, that an improved, articulated administrative structure has facilitated the program, and that community and parental cooperation has been secured. Specific recommendations at all levels of education and at all administrative and teaching levels were made on the basis of the findings and current trends in education.

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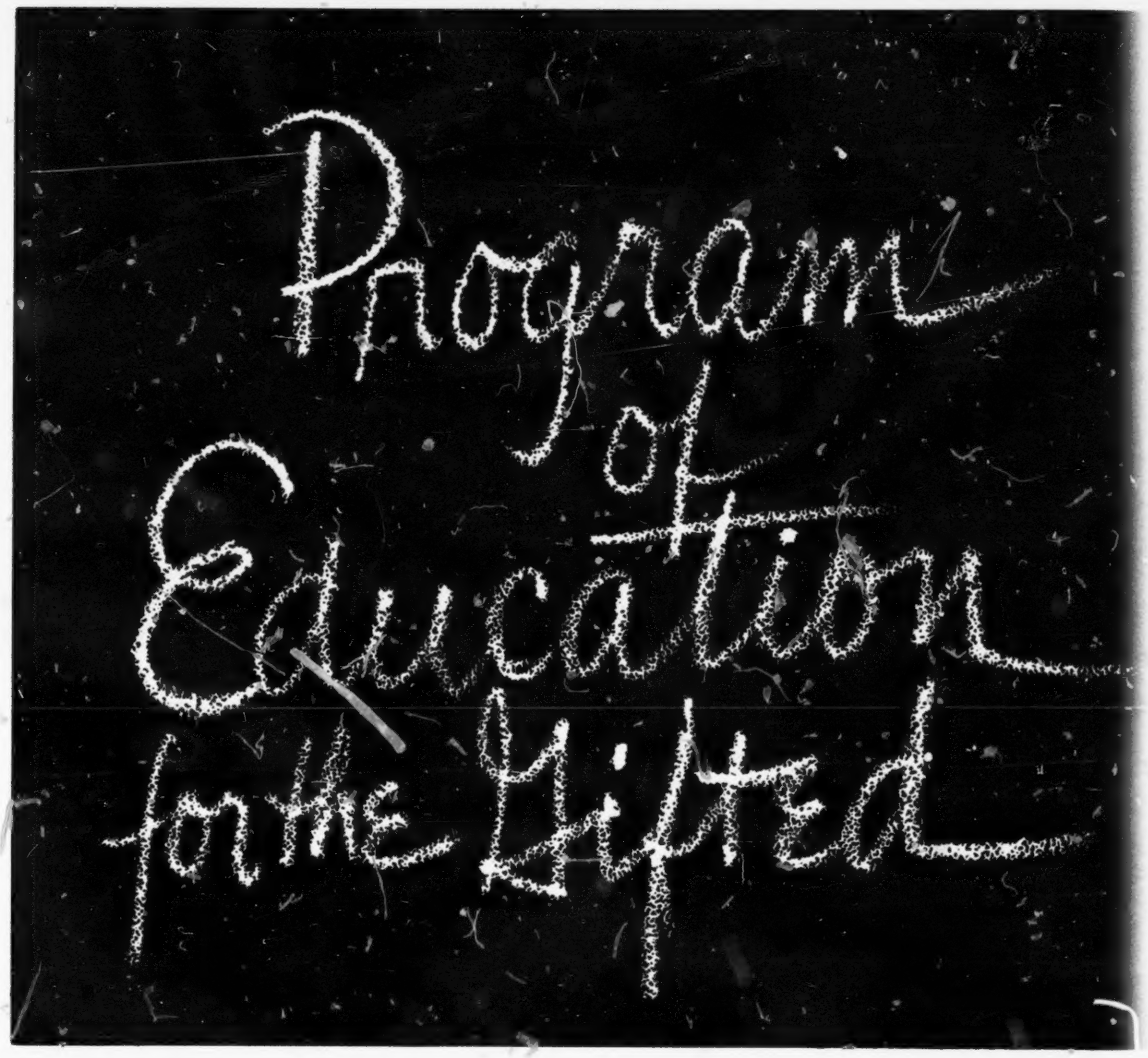

Program of Education for the Gifted

CHICAGO PUBLIC SCHOOLS

AUGUST 1964

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PROGRAM OF EDUCATION FOR THE GIFTED IN THE CHICAGO PUBLIC SCHOOLS

A Third Look

Study Report Number Twelve

1964 Series

BENJAMIN C. WILLIS
General Superintendent of Schools

CHICAGO PUBLIC SCHOOLS
August 1964

Educational Materials Laboratory
Office of Education
MAY 1965
DEPARTMENT OF
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FOREWORD

Study reports of the various educational programs have been made from time to time during the past ten years. These studies are in addition to the review and revision of curriculum materials. Reports have included such areas as elementary education, secondary education, junior college, teachers college, recreation, and the summer school program. Some areas have been formally reviewed and "next steps" recommended once during the past decade while others have been reviewed two or three times.

This report, Program of Education for the Gifted in the Chicago Public Schools, is the result of a study conducted by a city-wide committee, as were those named above. The membership on this committee reflects the various geographic sections of the city; the pertinent areas of the educational program, instructional materials, and/or facilities; and the various organizational levels of teaching, administration, and supervisory responsibility.

This report is a contribution to the study of schools approved by the Board of Education on January 9, 1963, and will be reviewed by the Chicago Public Schools Survey Committee.

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Chapter I

GROWTH OF THE PROGRAM FOR THE GIFTED

Introduction

Almost a decade has elapsed since the first committee was assigned to survey the program for the gifted in the Chicago public schools. The initial findings and recommendations of this committee were published under the title Report on the Program for the Gifted Pupil in 1957. The next report, titled A Second Look at the Program of Education for the Gifted, published in 1959, reviewed the status and progress of the program and made further recommendations.

As an instrument in promoting and organizing a system-wide program for pupils of outstanding ability, the 1957 report offered an overview of authoritative opinion on facets of the program such as definitions of the gifted, identification and selection, acceleration, enrichment, plans of organization, and current practices. Chicago school administrators and teachers found this material invaluable in organizing educational programs for the gifted in their schools.

The second report in 1959 surveyed the progress and status of the program and noted the impressive increase in the number of schools offering a program for the gifted. It pointed up the increase in specific programs in the high schools; it noted the emergence of "place out" in science and mathematics; it indicated the increasing articulation of the elementary and secondary schools; and it described the growth of modern language classes in the elementary schools.

Many of the recommendations of the second report have been implemented in the current program of education in the Chicago public schools. The emphasis upon a suitable educational program for each school's top-level pupils, the priority given to promoting high achievement in the academic areas of the curriculum, the institution of the annual admission and promotion plan, the development of the six-year modern language sequence for the gifted students, and the introduction of new and significant curriculum guides in the major academic areas which provide learning activities in depth for gifted students--all these and other recommendations of that report have been incorporated in the educational program for the gifted.

The present study is the third in this series; it provides the current link in the continuity of the program for the gifted in the Chicago public schools. Like its predecessors, this report may also serve to stimulate every school to provide further for the student with special gifts and talents.

In order to present the content of this report, comprehensive questionnaires, prepared in March 1964, were completed by Chicago public elementary and secondary schools. It is from this data and other information available in the central offices that the current status of the program can be described. The current report, then, will summarize the growth and development of the program for the gifted since 1959. It will point up needs and make suggestions for the further improvement of the program in the Chicago public schools.

Rationale of a Program for the Gifted

That the education of the gifted has long been of vital concern to the Chicago public schools is evidenced by the fact that such programs have been established in accordance with the basic philosophy of the Chicago schools as stated in the leaflet Quality Education: Some Guiding Principles for the Chicago Public Schools.[1] In brief, these principles are listed as follows:

Education serves all people in a democracy.
Education develops democratic ideals.
Education changes behavior.
Education deals with all aspects of life.
Education functions through many agencies.
Education continues throughout life.
Education aims at self-direction.
Education provides for intelligent adjustment to social change.

In sum, the basic philosophy of the Chicago public schools is oriented toward quality in education, with each individual to be educated in accordance with his abilities. Special abilities are found in all socioeconomic classes. However, a favored home environment certainly gives the bright child more opportunity to develop his gifts. On the schools, therefore, rests an increased responsibility to identify the gifted pupil in every level in society and to provide him with stimulation and opportunities for his maximum development.

The basic premise of the Chicago public schools in providing a program of education for the gifted is that whatever improvements are made in educational opportunities for the gifted will also benefit all other students. Any evaluation of school organization, personnel, teaching methods, educational materials, and facilities in terms of individualization, such as the program for the gifted, can result only in a totally improved program of education for all pupils.

---

[1] Chicago, Board of Education, Quality Education: Some Guiding Principles for the Chicago Public Schools (Chicago: the Board). (Leaflet, 1951; reprinted in 1963.)

Constant study in improving the educational program of the Chicago public schools is made necessary by the many changes in the population and area which the schools serve. In 1960, for example, census figures indicated significantly that for the first time the educational level attained by adults, twenty-five years of age or older, in the city of Chicago had dropped below the average for the state of Illinois and for the nation as a whole. Thus, greater urgency is imparted to the educational program for finding and developing the talent available in every group in our urban society.

The Gifted and Talented

Who, then, are the pupils with whom the program for the gifted and talented is concerned? In professional literature terms are employed rather generally and somewhat interchangeably: the gifted, the talented, the superior, the brilliant, the bright, the academically able, and the creative. It is difficult, if not impossible, to select one term and one definition that will be absolute and categorical. For this report, therefore, the term gifted will subsume the general designations of the academically able and the talented.

Were it possible to make a clear-cut, specific definition, there would always be the danger that such a definition would automatically exclude certain individual pupils, or groups of pupils, who did not precisely fit the mold in every detail. It is considered sounder procedure to describe the gifted with sufficient flexibility so that neither their potential talents nor the significant contributions to society that might be expected to flow therefrom would be precluded. In this report, therefore, the gifted child may be defined as one "whose performance in a valuable line of human activity is consistently or repeatedly remarkable."[2]

In his exhaustive study, Analysis of Research on the Education of Gifted Children,[3] Gallagher has made three genuine and significant distinctions. He defines the highly gifted as those who have an IQ of 148 or above on the Stanford-Binet test. These people comprise one-tenth of one per cent of the general population. The next group which Gallagher defines as the gifted is composed of individuals who have an IQ of 132 or above on the Stanford-Binet test. It comprises two to four per cent of the school population. The third and lowest group in the continuum of general intellectual superiority is termed by Gallagher as the academically talented. According to his definition individuals in this group have an IQ of 116 or above on the Stanford-Binet test. This group constitutes fifteen to twenty per cent of the school population.

---

[2] Paul Witty, Education for the Gifted, Fifty-seventh Yearbook of National Society for Study of Education (Chicago: University of Chicago, 1958), p. 55.

[3] Illinois, Office of the Superintendent of Public Instruction, Analysis of Research on the Education of Gifted Children, by James J. Gallagher (Springfield: the Office, 1960), pp. 4-6.

It is generally conceded, according to Gallagher,[4] that the strengths of gifted children are centered in the following abilities:

the association and interrelation of concepts
the critical evaluation of facts and arguments
the creation of new ideas and origination of new lines of thought
the ability to reason complex problems through
the ability to understand other situations, other times, and other people: to be less bound by one's own peculiar environmental settings.

In general, Chicago principals and school staff have never held to rigid definitions of intellectually gifted children. The 1959 report on the program for the gifted noted that programs which were described in educational literature were planned for a limited selection of pupils and did not provide for the needs of the great number of able and talented pupils whose scores cluster about IQ 115. In contrast, the program in the Chicago public schools has been predicated upon the basis of providing for all academically able and talented students in each school. The deciding criterion used by Chicago schools is the ability of the pupil to perform successfully at a high level of achievement, whether it be academic, artistic, mechanical, or physical.

Growth of Programs

Since the first survey of programs for the gifted in 1957, there has been a continual increase in the number of schools reporting such programs. Table 1 shows that in 1959 there were 339 schools, including 297 elementary schools and 42 high schools which had organized such programs as compared to 116 elementary schools and 37 high schools in 1957. The present report indicates that 364 elementary schools and 53 high schools maintain specific programs for the gifted.

---

[4] *Ibid.*, p.5.

Table 1

GROWTH IN NUMBER OF SCHOOLS REPORTING PROGRAMS FOR THE GIFTED
1957 to 1964

	As Reported in 1957	As Reported in 1959	As Reported in 1964
Elementary Schools	116	297	364
High Schools	37	42	53

Programs for the gifted are a part of the multi-track plan of all Chicago general and technical high schools. Some elementary schools do not report a specific program for the gifted; however, all elementary schools do identify the able and provide guidance and counseling for the gifted students.

The 1959 survey pointed out that the program for the gifted had been extended to children in the first grade. This downward aspect is emphasized in the present survey of 220 elementary schools which have initiated the continuous development program in the primary grades. This emergent form of nongraded education in the primary block offers able pupils the opportunity to learn at an accelerated pace regardless of former grade levels.

Identification and Selection of the Gifted

From the foregoing general description of "giftedness" and "the gifted," it is clear that the process of identification is not an easy or routine procedure, nor can it be made by a casual untrained observer. Those who still cling to the concept of giftedness as being synonymous with extremely high intellectual ability are numerous. However, broadening of the definition to embrace one or more of a multitude of high level capacities, which may or may not be related to intelligence, has gained recognition throughout the fields of psychology and education. This diversity is exemplified in the present study by the many areas in which Chicago public school principals have indicated their identification of gifted children. Authorities seem to be in general agreement that giftedness may appear and should be cultivated in many areas.

Chicago public schools systematically identify children as being gifted in areas of intellectual, scientific, mathematical, English and foreign language, social studies, leadership, artistic, musical, dramatic, dancing, mechanical, and physical abilities.

The frequency of identification of intellectual ability by principals approaches unanimity. Principals state that identification by intellectual ability is based not only upon the results of the basic program of standardized intelligence and achievement tests, but also upon school marks, teacher judgment, and anecdotal records.

Most research authorities center the lowest level of intellectual giftedness as between the IQ scores of 130 and 140. Only 6 per cent of both elementary and high school principals report setting a minimum intelligence quotient of 130 for identifying academically gifted children. This represents a significant change in outlook from that shown in the 1957 and 1959 surveys.

Table 2 indicates the lowest limit of intelligence quotients used by 417 elementary schools and 51 high schools to identify pupils as academically gifted in 1964 as compared to the lowest limits used in 1959 and 1957. The percentages reported for 1964 differ markedly from previous years and show that school staffs are aware of the challenge in these lowered limits. Those schools which employed the IQ of 139 or above as cutoff point write that this figure is used to separate the highly gifted from the bright or talented of whom they have many in their programs. At the lower end of the scale, schools listing a cutoff point at or below IQ 110 offer individualized instruction and guidance for their limited number of pupils with higher IQ's. In general, Chicago public schools do not follow a prescribed cutoff point, but principals and their staffs determine that identification which is most appropriate to their individual school.

Table 2

DISTRIBUTION OF LOWEST LIMITS OF INTELLIGENCE QUOTIENTS USED TO IDENTIFY PUPILS AS GIFTED AND CORRESPONDING PERCENTAGE OF SCHOOLS USING THESE LIMITS

IQ	1957[b]	1959[c]	1964[d]
Above 139	---[a]	.6	.5
Above 129	22.6	7.3	6.0
Above 124	40.1	31.3	22.8
Above 119	70.1	66.3	53.6
Above 114	78.6	78.8	71.8
Above 109	96.6	93.8	91.4
Below 110	3.4	6.2	8.6

[a] Not indicated
[b] Report based upon 116 elementary and 37 high schools.
[c] Report based upon 344 elementary and 42 high schools.
[d] Report based upon 317 elementary and 51 high schools.

Elementary School Practices

Elementary school principals state that many gifted children may be overlooked because of language handicap, lack of reading skill development, cultural disorientation, or other factors not measured by tests. However, they write that, by providing a continuous study of such pupils' progress, by referring them to the Bureau of Child Study for individual psychological and achievement testing, by placing them in coaching reading groups taught by the adjustment teacher, by utilizing the after-school reading centers, and by conferring with parents, many pupils who possess high abilities may be assisted to reach their potential.

In spite of some shortcomings in utilizing intelligence and achievement scores, administrators do recognize their value as a screening device when combined with observation of pupil interests and talents. The fact that more than three-fourths of Chicago elementary school principals in this report identify children with scores in the normal to bright range as being intellectually gifted demonstrates a desire to provide special opportunities for the most able pupils in each school regardless of technical or arbitrary standards of giftedness.

Information relative to the range of intelligence quotients of children is readily available in the individual elementary school. These data, supplied by the principals of 441 Chicago elementary schools and branches, are shown in Table 3 on page 8. In addition to the numerical distribution of scores these data emphasize the total decrease in high level IQ's that has come with the rapid population growth of the Chicago elementary schools, movement of high socio-economic groups to suburbs, and the influx of children from culturally disadvantaged areas. A comparison of high IQ's among Chicago children in grades 1 through 8 by percentages as reported in 1957, 1959, and 1964 is indicated below:

	1957	1959	1964
IQ's above 130	3.1 per cent	2.6 per cent	1.2 per cent
IQ's above 125	5.8 per cent	5.0 per cent	2.8 per cent
IQ's above 110	22.5 per cent	27.5 per cent	22.1 per cent

This drop in the percentage of high level intelligence quotients, the change in principals' requirements in identifying intellectually gifted pupils, the growth in efforts to provide for children with the greatest capacity in the individual school, and the search for high level skills in all areas have led to a program for gifted children of considerably greater breadth than earlier programs.

Illustrative of the broadened program, more than half of the elementary schools in 1964 systematically identify gifted boys and girls in leadership, art, and music. Over 200 schools identify outstanding writers; 183, gifted pupils in music; 154, in physical skills; and many schools identify pupils in dramatic, dancing, mechanical, and speech talents.

Selection of pupils gifted in reading skills, by means of standardized achievement tests, is common in a majority of Chicago elementary schools. Boys and girls gifted in the area of mathematics are also

Table 3

DISTRIBUTION BY DISTRICTS OF PUPILS' INTELLIGENCE QUOTIENTS, GRADES 1-8, MARCH 1964

Dist.	Schools and Branches Reporting	Range of Intelligence Quotients: Number of Pupils									Per Cent Above 110 IQ	Per Cent Above 125 IQ
		Below 90	90-99	100-109	110-119	120-124	125-129	130-139	140 & Above	Total		
A	19	612	1318	3450	3399	911	425	250	86	10,452	48.5	7.3
B	20	1198	2362	4111	4004	1227	522	379	152	13,955	45.0	7.1
C	26	1195	2140	4567	3911	1039	435	240	66	13,593	41.9	5.5
D	23	1042	1687	2998	2824	669	318	202	36	9,776	41.4	5.7
E	23	1512	2568	4012	3397	874	451	293	81	13,188	38.6	6.3
F	21	1540	2159	3801	3151	710	239	150	28	11,778	36.3	3.5
G	17	1440	2215	3743	2737	683	302	173	40	11,328	34.7	4.5
H	26	2578	3322	4209	3440	820	369	263	67	15,068	32.9	4.6
I	23	1908	2297	3086	1931	402	153	104	18	9,899	26.3	2.8
J	31	3742	3958	4669	2840	705	309	158	45	16,426	24.7	3.1
K	18	3362	3104	2676	1446	488	210	159	82	11,527	20.7	3.9
L	23	3704	4360	4348	2184	337	131	81	25	15,170	18.2	1.6
M	20	4677	4152	3381	1484	202	84	39	23	14,042	13.0	1.0
N	12	3492	3160	2885	1176	127	49	23	4	10,916	12.6	.7
O	19	4065	3892	2999	1039	225	36	20	4	12,280	10.8	.5
P	24	5053	4223	3896	818	393	165	75	21	14,644	10.1	1.8
Q	19	6198	4420	3045	1224	126	54	90	4	15,161	9.9	1.0
R	15	4384	3700	2842	826	98	37	25	2	11,910	8.3	.5
S	18	8519	6841	4685	1427	188	47	19	6	21,728	7.8	.3
T	21	9760	6071	4426	1379	145	100	50	4	21,935	7.6	.7
U	23	6495	4556	3260	869	71	26	11	0	15,252	6.4	.2
Total	441	76440	72505	77089	45506	10446	4463	2804	789	290,036		
Per Cent of Total		26	25	27	16	3.6	1.5	.96	.27		22.1	2.8

identified by standard tests. In significant numbers, gifted children are discovered through testing in language arts skills, science, and social studies. Other means of selection include indentification by classroom teachers, adjustment teachers, principals, and specialists in each of the areas.

High School Practices

Chicago high schools systematically identify their students on the same basis as the elementary schools. Hence, intellectual ability as represented by intelligence tests and achievement scores of students is utilized by all of the fifty-three high schools reporting in this survey. Outstanding ability in science is a factor considered in conjunction with intellectual ability by forty-three schools. Leadership as demonstrated by participation, direction in student government, and school organizations is another important ability. Forty-one schools report this factor. Artistic ability which includes all phases of art is considered by forty-two schools in its inventory. Musical ability is listed by forty schools, while dramatic talent is mentioned by twenty-four schools and dancing listed by seventeen.

Creative ability in writing is an asset which is mentioned by thirty-four schools. Ability in mechanical skills is mentioned by twenty-four schools, and physical skills are considered by thirty-two schools. Two high schools consider abilities in business skills and two mention home economics skills.

The entire range of abilities as considered by principals and faculties of the high schools is reflected in the rich and varied program of courses and co-curricular activities available to gifted students in the Chicago high schools.

Since the reorganization of school districts in 1955 which brought high schools and their contributing elementary schools under the supervision of one district superintendent in each of sixteen districts, now expanded to twenty-one districts, articulation between the high and elementary school has improved. Hence, it is now possible for the high school to have a complete record of the attainments of its entering freshmen. The selection of the most able students by the high school is based upon the contents of their personnel folders which contain intelligence and achievement test scores, previous school marks, anecdotal records, teacher recommendations, and interest inventories which have been compiled by the teachers of the elementary schools. Every high school responding to this survey listed each of the foregoing items for use in placement of gifted pupils in the top "100" program, honors classes or place-out classes in English, science, mathematics, and social studies.

The data submitted by the high schools show that thirty-three schools, or approximately two-thirds of the high schools, accept all students at an IQ 115 or above, as academically able. Eleven schools begin at IQ 110 for selection of the able, while five schools use the IQ 105 or above for their selection. One school in a favored area uses the IQ 130 or above as the lowest intelligence quotient acceptable for a student to enter its honors program. Another school reports that it uses the eighth and ninth stanines for entrance to its honors program. As the stanine scale, with its broad measure of scores becomes more familiar to high school staffs and students, it is probable that all the high schools will eventually use this concept.

In general, all high schools report that students admitted to honors classes are achieving at least two years above grade level. Many schools require that the achievement in reading be three years above grade level for admission to honors classes in English and social studies.

Changes in Administrative Practices

Several important changes in administrative practice have occurred since the publication of the 1959 report. A striking increase in the participation of teachers in planning programs of education for the gifted was noted, then, and has since been carried forward. At present there are 356 faculty committees studying provisions for the gifted child in all phases, under direction of principals and district superintendents. New approaches in instruction and organization such as team teaching, continuous development, multi-track programming, and variability in scheduling and grouping are especially noteworthy.

Table 4 on page 11 indicates some changes in selective administrative practices since 1959. The practices utilized by each school are reflective of the philosophy of the school staff, the interests and cooperation of the faculty and staff, facilities of the school building, and the size of the school.

Table 4

COMPARISON OF SELECTED ADMINISTRATIVE PRACTICES AS REPORTED BY SCHOOLS IN THE 1959 AND 1964 SURVEYS

Administrative Practice	Number of Schools	
	1959	1964
Continuous Development (Nongraded Block)	---[a]	224
Variability in Scheduling (includes length of class period)	53	128
Use of Faculty Committees	224	356
Ability Grouping	211	320
Place-Out Practices	---[a]	46
Flexible Promotions during the School Year	296	364
Special Groups - Before and After Regular School Schedule	---[a]	106
Team Teaching Projects	---[a]	63

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[a] Not reported in 1959.

Chapter II

METHODS OF PROVIDING FOR GIFTED PUPILS

Acceleration

Among the most effective administrative devices in the program for gifted children is acceleration of one type or another. Permitting children to proceed through the elementary, secondary, and even college levels at their own individual ability rate rather than according to chronological age standards has long been recognized as a means of avoiding frustration and boredom to the individual as well as a means of providing that individual's services to society earlier and for a longer period of time. Gallagher[1] indicates that

> "It is very difficult to find any study which has reported on balance, any negative affects of acceleration when the acceleration is done as part of a planned program and is limited to reducing the student's total educational program one or two years."

Acceleration is practiced in several ways in the Chicago public schools. Traditionally, grade skipping has been the time-honored method employed by elementary schools to accelerate gifted pupils. Under the former semiannual promotion plan, skipping, in many cases, involved the placement of brighter children in a split-grade room for one semester. This placement offered the able child the opportunity to learn the material of his own grade as well as of the next higher half-grade within one semester. In some ways this may have been a telescoping process, rather than a skipping process. The first report in 1957 stated that 299 schools permitted the skipping of a grade. By 1959 this practice was reduced to 206 schools. In the current survey, 156 schools, or only thirty-six per cent of all elementary schools, report skipping of pupils.

Because of the omission of content vital to later learning experiences and some resulting social maladjustments on the part of pupils, Chicago elementary principals indicate it is likely that under the annual admission and promotion plan initiated in September 1961, that grade skipping will be utilized sparingly in the future. The difficulty of modifying a two-year plan so that it will telescope into a one year unit is too difficult for most students.

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[1] James J. Gallagher, Teaching the Gifted Child (Boston: Allyn & Bacon, Inc. 1964), p. 256.

In the transition from the semiannual to the annual promotion plan, another form of telescoping acceleration has been employed. Special promotions have affected thousands of pupils as the 3A-4B-4A and the 6A-7B-7A semesters have been telescoped into one-year programs. Although not specifically designed as a method of accelerating the gifted, this procedure has enabled many academically able pupils to gain a half year. The Department of Curriculum Development has assisted teachers in this program by furnishing teaching guides especially designed for these transitional grades.

Continuous Development Program

The continuous development plan, a nongraded organization plan developed by the Chicago school staff, has rapidly emerged as an administrative and instructional procedure in the elementary schools. At the present time, 245 elementary schools report that they are using this approach in their primary grades; 138 more report that they will move to the continuous development plan as of September 1964, thus making a total of 383 elementary schools in which the continuous development plan has been initiated.

Because of its emphasis upon the individual progress of pupils, the continuous development plan favors acceleration of gifted pupils. In this plan, pupils progress at their own rate through the two major areas of reading and mathematics in sequential blocks of learning which are termed "levels." Whenever a pupil has mastered the work in one level, he is moved into the next level. There are no arbitrary time limits set for each level. Since each child progresses to the next step as he accomplishes the preceding one, there is no failure or consequent frustration.

While the mastery of reading and mathematics is emphasized in the continuous development plan, pupils also study the curriculum areas of language arts, science, social studies, art, music, health, safety, and physical education. Each child may complete the primary grade content at his own pace; for the gifted child, the continuous development plan offers him the opportunity to complete the basic primary three-year plan in a few as two years.

Twenty-four schools report extension of a form of the continuous development plan to the intermediate levels, and eighteen to the upper elementary grades. Many schools find achievement level grouping in intermediate and upper grade mathematics and reading an effective extension of the principles of continuous development.

"Place-Out" for Elementary School Graduates

Place-out as a means of accelerating academically able elementary school graduates has increased considerably since 1959. There are now approximately 3000 freshmen who have placed out in high school courses in contrast to the eighty who placed out for the first time in science as reported in the 1959 survey.

Acceleration by place-out enables the gifted freshman to immediately elect more advanced courses in science, mathematics, and foreign language. It makes it possible for him to have four years of laboratory science which might include advanced placement or college level courses, four years of mathematics, and a six-year sequence in modern foreign languages. The intent of place-out is not to hasten the graduation of the able high school student but rather to give him an "in depth" approach to his high school career.

The growth of place-out practice may be attributed to a greater degree of articulation between the high school and its contributing elementary schools, the improvement of instruction in elementary school science and mathematics, and the increased emphasis placed upon the six-year program in foreign language instruction in both elementary and high schools.

In 1963, reports from the schools indicate that 2180 able elementary school graduates placed out of general science, by examination, and elected biology as their freshman laboratory science. Nine high schools report that 310 freshmen placed out of algebra and were assigned to advanced mathematics classes. Other high schools report that 280 elementary graduates who had been enrolled in elementary classes taught by qualified non-quota foreign language teachers were assigned to advanced classes in either French or Spanish. One high school reports a place-out class in English. Many high schools will place-out individual freshmen of outstanding ability where there are not enough candidates to warrant a full class. These freshmen, in effect, have an individual program especially designed to meet their abilities.

In the mathematics place-out program, several elementary schools report that, by special arrangement, their gifted eighth grade groups are taught in early morning classes by high school mathematics teachers in the high school building. Other elementary schools report that some high schools are following this practice in the field of instrumental music and that their gifted seventh and eighth graders report before regular school hours to the high school for this special instruction.

High School Practices in Acceleration

In addition to place-out for freshmen, a practice that has emerged because of the close articulation between elementary and high schools, other acceleration practices for gifted students are reported by high schools. These practices are provisions for the election of a fifth major subject, the organization of telescoped honors classes, the organization of college level classes such as advanced placement classes which meet College Entrance Examination Board specifications, and college classes taught by Chicago City Junior College teachers in the high schools.

Fifth Major Subject

Most high school students carry a class load of four major subjects during the school year. The academically gifted and talented student is encouraged to elect an additional subject provided he is performing at top level.

Thirty-eight high schools report that they encourage and permit academically able students to elect a fifth major subject and that this practice is not limited to senior students only, but that sophomores and juniors may have this subject if classes are available. Some schools state that they permit freshmen who are in the "100" group and have demonstrated competence to carry an additional major subject. However, as in 1959, few schools find it advantageous for freshmen to carry a fifth major especially when these same students are programmed for honors biology and other academic honors classes.

At this time, fifth major subjects are elected by academically able students to provide for enrichment or added depth (as in the case of modern language) rather than to accelerate their progress through high school. Today's practice is in contrast to 1959 when one purpose of a fifth major was to hasten a student's graduation from high school.

Telescoped Honors Classes

High school principals write that by telescoping certain honors classes, that it is possible, especially in mathematics, to accelerate the progress of their top students in a particular curriculum area. Twenty high schools report that they have thirty-one telescoped honors classes in their program for gifted students. Of these classes, twenty-four are offered in mathematics, six in English and one in contemporary American history. In mathematics, fifteen classes telescope plane and solid geometry.

Telescoping is particularly fitted to the mathematics curriculum since advanced courses such as calculus or probability and statistics may be added readily to the program and thus provide greater depth for gifted students.

College Level Classes

Advanced Placement. A most significant move in providing for gifted high school student has been the organization of advanced placement classes in the high schools. Twenty-three high schools now report that they offer forty-eight advanced placement classes which meet the requirements of the College Entrance Examination Board. These schools also reported that 1125 students were enrolled in these classes. The 1959 survey made no mention of these advanced placement classes.

Advanced placement classes are offered in American history, European history, biology, chemistry, English, French, mathematics, and physics.

Outstanding seniors, usually those enrolled in the "100" program, and other senior honor students may elect one or more of these rigorous college level classes. Instruction is especially geared to meet the requirements of the college board. In order to earn college credit for work taken in advanced placement classes, students must not only receive high marks in the advanced placement classes, but they must also write the spring examinations administered by the College Entrance Examination Board. Many gifted Chicago high school graduates have either earned place-out credit or additional college credits through this rigorous process.

Chicago City Junior College. In September 1959, the Chicago City Junior College and the Chicago high schools arranged for entrance to college classes by gifted high school students. Under this cooperative plan, college level classes taught by faculty members of Chicago City Junior Colleges were offered either in the high school or on a college campus after high school hours.

Between September 1959 and June 1963, 1372 gifted high school seniors from thirty high schools participated in this program. Classes for 615 of these students were held on a college campus after high school hours; classes for 757 students were taught in high school buildings on a schedule arranged for the convenience of the students. Most of the students in these classes were seniors although some top level juniors and few highly gifted sophomores were also enrolled.

College classes have been offered in a variety of subjects. These include English, Russian, mathematics, chemistry, physics, and philosophy. Regular college credit has been granted to all the students who successfully completed these classes.

The present survey shows that fourteen college classes in English, mathematics, and science, with an enrollment of 290 students, are taught by Chicago City Junior College teachers in the high school.

Summer School Opportunities

Summer High School Program. The summer high school program in the Chicago public schools has always offered opportunities for able students to either accelerate their school progress or enrich their program of studies. However, until 1955, when tuition charges were dropped, many students of modest means were not able to attend. Since then enrollment has climbed. In 1954, the last year for which tuition was charged, there were 5,766 high school students enrolled in ten schools. By 1963, there were 46,019 high school students enrolled in thirty-one schools.

Summer Honors Classes. In the summer session of 1963, twenty classes designed especially for gifted high school students in the curriculum areas of English, science, mathematics, and history were centered in ten schools. These classes which met daily for five hours during the eight weeks of the summer session were taught by outstanding teachers. Students were especially recommended by principals and counselors for the honors classes. Instruction was carried on in seminar fashion by the teachers who emphasized breadth of reading, independent study, the presentation of papers, and experimentation. Libraries in the summer schools were utilized heavily by the honor students; some honors classes in English and history were held in library classrooms for that reason. In the summer session of 1963, there were 531 gifted students in this program. Since the inception of the program in 1956, there have been 2,705 gifted students served by the summer honors program.

Combined-Study Summer Seminars. A unique non-credit combined-study seminar was first organized in the summer of 1961 and expanded in 1962. Seventy-two highly gifted high school students specially recommended by their home schools were enrolled in four seminar groups. Two seminars which combined English and history were taught in one north and one south side school; the other seminar groups which combined mathematics and science were offered in the same schools. Membership was kept small in these groups; the intent of the seminar was to provide for intensive study at a college level in the humanities and in science, and mathematics.

During the 1964 summer session the seminars were again available, and again, enrollment was limited to the highly gifted. In a survey of summer school opportunities offered by public school systems, the National Education Association cited the Chicago combined-study summer seminar.[2]

"Light - Color - Structure: An Action Seminar in Art," offered a unique opportunity for students in the 1964 summer school session who were talented in art. Students had the advantage of a concentrated allotment of time in the atmosphere of a major graduate professional school with many experienced teachers and professional artists, each of whom had a unique contribution to offer to the content of the course. The best facilities and resource persons in the Chicago area were available to these students. Classes were held at the Institute of Design of Illinois Institute of Technology and at times in the school and the Museum of the Art Institute of Chicago. Field trips were included as a part of the course, and a general critique was a weekly feature.

An expanded program of music instruction was offered in conjunction with the 1964 summer school program. Chorus, music theory and harmony, string classes, and band instruction were offered in four centers.

A Shakespearean Festival Seminar, included in the 1964 summer session, gave students an opportunity to become acquainted with the life and writings of the famous poet and to explore the Elizabethan period. Activities included viewing films and listening to the best recordings of the works of Shakespeare, attending plays and the Ravinia Festival, developing special projects, reading and enacting selected passages, and reading and discussing them under stimulating teacher leadership. The culminating activity was the presentation of a series of skits organized around the theme "Women in Shakespeare's Plays" and presented by the students for parents, English classes, and the public.

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[2] National Education Association, NEA Research Bulletin, XLII, No. 1 (February 1964), p. 20.

A French Day House provided 1964 summer school students a varied program entirely in French. Included were field trips, slides, and films; guest speakers including visitors from France; language practice and language laboratory activities; participation in songs, dramatic skits, and other activities to increase their skill in the language. A French newspaper prepared by the students was a challenging culminating experience.

Other Summer School Opportunities. Chicago's summer school program also gives able high school students the opportunity to elect additional academic or other classes which they cannot include during the regular school year because of their heavy program. Summer school classes allow these students to elect more courses in their major academic areas, which they could not do during the regular school year. Many able students acquire typing and stenographic skills during the summer session, which they will use in future college attendance.

Table 5 indicates the impressive growth of the summer high school since 1954. Year by year, enrollment has climbed and the number of graduates increased. Since 1954 there has been a total of 253,095 students enrolled in the summer program. The total number of summer high school graduates was 8,360 of whom there were many able students who accelerated their high school careers by at least a year.

Table 5

SUMMER HIGH SCHOOL GROWTH
1954 to 1963

Year	High School Enrollment	Number of Graduates	Enrollment in Classes for Gifted
1954	5,766	420	None
1955	8,308	474	None
1956	11,893	488	154
1957	17,664	580	162
1958	26,530	711	199
1959	29,249	874	232
1960	32,115	1,091	284
1961	36,330	1,210	292
1962	39,221	1,199	319
1963	46,019	1,313	531
Total	253,095	8,360	2,173

Grouping

Grouping as a practice in placing together students of similar abilities and interests, for their instruction and guidance, has long been an administrative practice in the Chicago public schools. For the gifted and talented child, grouping offers him the challenge of working with his peers and studying in areas of knowledge beyond the grasp of other students.

Grouping or sectioning gifted children for instruction has been extended since 1959 as evidenced by the replies of both high school and elementary principals in this survey. The responsibility, however, for designing the system of grouping which best meets the needs of pupils in the individual schools is that of the principal and his staff.

The plan of grouping gifted or talented pupils is dependent largely upon the size and organization of the elementary school. Today, Chicago elementary schools display a diversity of types in contrast to the formerly standardized K-8 graded school.

For example, in June 1963, of 455 elementary schools and branches, only 257 schools retained the typical K-8 grades. None of the twenty-one districts maintained this organization for all of its elementary schools. There were 132 schools which were organized on a K-6 grade plan. Upper grade centers which generally involve seventh and eighth grade units numbered twenty-five. In addition, there were some K-3 primary and intermediate grade schools. The variety of these school organizational plans indicates the challenge to school staffs as they plan for the gifted in their schools.

Forms of Grouping in Elementary Schools

In 1959, there were 297 elementary schools which reported a program for the gifted. In 1964 replies from the elementary schools indicate that 364 elementary schools now maintain a program for gifted or talented pupils. While 320 elementary schools report adoption of ability grouping as a practice, almost one hundred schools state that they have devised a complete full-time organization based upon ability grouping. These schools, for the most part, have large memberships so that their administrators have a certain degree of flexibility in scheduling groups. However, other elementary schools state that they group intermediate and upper grade able or talented students on a part-time basis during the school day.

Scores on intelligence tests and reading tests as well as teacher judgment are the basic criteria used in grouping the academically able. Pupils in 363 schools are grouped primarily on the basis of achievement scores in language arts. Two hundred fifteen schools report that they utilize a combination of intelligence and reading tests for ability grouping. Almost 200 schools have set up ability groups in mathematics. Grouping for foreign language instruction is followed in 164 schools. One hundred sixty schools group able science students in science seminars or special science classes.

Talented students are served in 120 schools by grouping them for special art, music, or creative writing. In descending order of frequency, elementary schools provide grouping for special language arts classes, speech, social studies, dramatics, and dance groups. Elementary principals write that by sectioning gifted pupils in areas of their proficiency that they are able to reduce the range of pupil needs within a class group; and that in classes for the gifted the teacher may work at a higher level of attainment with his pupils while other learners at lower levels, also, are taught more effectively.

There still are many small schools where grouping, of necessity, takes place in the classroom. To provide for the range of abilities in a classroom in a small elementary school, teachers organize small informal groups. Purposely, these groups are kept small and flexible so that an able pupil may have opportunities for exploration and depth in learning. More than half of the elementary principals state that, where they have not been able to schedule gifted or academically able pupils by groups, they have provided enrichment materials or activities for them in the regular classroom.

Upper Grade Centers

Grouping upper grade elementary students to better meet their needs has resulted in the organization of twenty-five upper grade centers and branches since 1955. Located in all areas of the city, the upper grade centers consist usually of seventh and eighth grades although some centers include the ninth grade.

Because of their large enrollments in the seventh and eighth grades, the upper grade centers are able to afford greater flexibility and variety in pupil grouping. This results in opportunities for progress by pupils at various academic levels and at various rates. For the gifted student this also means that he may study and work in well-equipped classrooms, libraries, science laboratories, and electronically equipped foreign language rooms, under the direction of specialist teachers.

Not only does flexibility in scheduling allow for full ability grouping in academic classes, but upper grade center principals report that they are able to organize programs for special interest groups such as science seminars, journalism clubs, art, library discussion groups, and musical organizations.

One upper grade center reports that forty-five graduates qualified for freshman placement in biology at high school. Another upper grade center principal states that, because of a specially qualified nonquota foreign language teacher and electronically equipped foreign language classroom, twenty-one graduates qualified for advanced placement in foreign language.

Special Elementary Summer Schools (Grades 1-6)

One of the most significant methods of grouping elementary pupils for maximum educational gain has been demonstrated by the special elementary summer schools. Begun on an experimental basis with three schools in 1960, these schools have been designed to provide pupils in culturally disadvantaged areas with the best methods of teaching and learning. Because of its measured success, the program was expanded to five schools in 1961, and to ten schools in 1962 and 1963. In 1963, the ten special schools enrolled 6,235 pupils from 150 contributing schools. During the summer session of 1964, twenty special elementary summer schools were in operation; included for the first time in the program were experimental pre-kindergarten classes in two of the schools.

Because the purpose of the special elementary summer schools is to demonstrate the most productive methods of instruction for pupils in disadvantaged areas, optimal conditions for instruction are carefully arranged.

All special schools are limited to 600 pupils with 100 pupils allocated to each grade. Each grade is grouped into four classes of twenty-five pupils; this homogenous grouping is based upon the results of achievement tests administered at the beginning of the summer session.

For able pupils, the special summer school offers **the opportunity** to work with their peers in learning activities of a challenging quality. Their classes offer them avenues of expression in literature, mathematics, creative writing, and speech. Since forty percent of the day is devoted to activities arising from integrated work units, there are further opportunities for the able pupil in developing language skills, mathematical skills, and understandings in social studies and science.

In each school there are creative and excellent teachers. Field trips, audio-visual equipment, and library services are provided. There is a fifty-minute daily in-service period for teachers. Through group meetings and individual conferences,parents are also involved in the program.

Serving each school is a principal, an adjustment teacher, a teacher-librarian,and a resource teacher. Available, too, are the services of psychologists, teacher-nurses, and consultants for language arts, social studies, mathematics, and science. The 1964 special summer schools included a parent coordinator on each staff.

Evaluation of the special summer schools by the professional staff **indicates that, because of lowered class size, homogeneous grouping, in-service** improvement period, enriched instruction material, and added auxiliary staff, **the special elementary summer school has far reaching implications for** the gifted pupil as well as for other pupils in regular elementary schools in disadvantaged areas.

High School Practices in Grouping

Grouping students on the basis of ability is a standard practice in

Chicago high schools. All high school students are grouped in varying ability levels upon their initial entrance into high school on the basis of their mental ability, achievements, interests, and elementary school recommendations.

The following are the designations for ability groups in Chicago high schools:

> Advanced Placement. This is a course at college level taught by a high school teacher using college instruction materials and techniques, and conforming to syllabi set forth by the College Entrance Examination Board.
>
> Honors. This is a class taught in accordance with the recommendation of the Chicago curriculum guides as specifically set forth for honors classes.
>
> Regular. This is the regular college preparatory level within which most students are expected to be enrolled; classes are geared to the student who is average or above in ability and achievement.
>
> Essential. As indicated in curriculum guides, these classes are designed for students working below regular standards and for those with remediable deficiencies; they are also offered for those who need more training before taking the college preparatory sequences. Placement also takes into account the potential ability of the student.
>
> Basic. These classes are designed for academically less able students with special deficiencies in ability and achievement.

The twenty-five top students in each grade level in each school is placed in the "100" program. Special guidance and curriculum adaptations are made to meet these gifted students' abilities and achievements.

The ability level programs are kept flexible and open-ended.

Many times, students who are originally enrolled in regular classes display a motivation and capability which prompt their transfer to honors classes. Many students are in honors classes in one or more subjects and in regular classes in other subjects. At no time are rigid organizations set up which do not permit access from one level to another. As academically able students progress in their high school career and indicate their potential, they are eligible to elect fifth major subjects, enroll in advanced placement classes (college level classes) and pursue independent study in advanced seminars.

The "100" Program. The "100" program for top high school students was instituted in Chicago high schools in September 1958. Since that time each high school has maintained a special and continuous program of motivation, guidance, and honors classes for its top one hundred academically able students. Essentially, this program identifies the twenty-five top scholars in the ninth, tenth, eleventh, and twelfth grades. The "100" scholars usually enter high school with place-out in science and mathematics. They are the scholars who elect challenging programs in science, mathematics, English, and social studies. This means that in their four-year stay in high school they may elect(through fifth majors) four units of a laboratory science; four or five units in mathematics; four units in English, in social studies, and in foreign language. Most scholars have aspirations of attending college and of entering upon a professional career; hence they are the students who elect advanced placement classes, college classes, and independent study in advanced science or mathematics seminars.

The "100" scholars are guided carefully by counselors in making decisions and long-term plans. In order to give them broadened opportunities for leadership and socialization, "100" scholars are not grouped separately by divisions, but are assigned to various homerooms in the high schools where they associate with other students of varied talents and abilities.

Many schools utilize the talents of the "100" scholars in tutorial programs; these students are leaders in student councils; they serve as editors of school publications; they are exhibitors in science fairs, leaders in honorary societies, and school representatives to various community and civic conferences and luncheons. The intent is to provide varied, rich, and meaningful experiences so that the scholars may develop into well-rounded citizens.

By grouping the top high school students into the "100" program, it is possible to orient them for the external scholarship examinations such as the American College Test, the National Merit Scholarship Tests, and the College Entrance Examination Board tests. All schools report special guidance groups for this purpose.

Each high school keeps a master list of the "100" scholars on file in its office. At periodic intervals, the achievements and marks of the scholars are evaluated by the associate superintendent, district superintendent, the principal, counselors, department chairmen, and class teachers. Where scholars are not working up to capacity, conferences are held by counselors with the students, parents, and teachers to make needed adjustments. Other honor students may also transfer into the "100" program if they display high potential and are recommended by teachers and counselors.

Since 1962, a great metropolitan newspaper has recognized the "100" scholars by sponsoring an annual dinner in their honor in McCormick Place. Top ranking scholars of each year class of the "100" program from every high school are honored on that occasion.

At the time of this survey, principals of fifty high schools report that approximately 5000 top high school scholars are members of this group.

Honors Classes. The total number of honors classes offered in the high schools has doubled since the survey of 1959. Then, principals of twenty high schools reported that 603 classes were offered in the major academic areas. In the current survey, forty-six high schools report a grand total of 1194 honors classes in English, mathematics, science, social studies, foreign language, and business education.

Table 6 below indicates the content area of these honors classes which also include the telescoped honors classes, the advanced placement classes meeting College Entrance Examination Board requirements, and college classes offered by the Chicago City Junior College in the high schools as of March 1964.

High school students who are academically able are grouped in honors classes. Honors classes differ from regular classes in the depth of study, breadth of learning materials, critical thinking experiences, and rate of progress. Through the assistance of multi-task curriculum guides prepared by the Department of Curriculum Development, teachers who instruct the honors classes are enabled to provide many high-level learning experiences and activities for these students. Faculty assigned to advanced placement classes in mathematics, chemistry, biology, physics, and English also have the help of special curriculum guides designed especially for advanced level students.

Table 6

NUMBER OF HONORS AND ADVANCED PLACEMENT CLASSES, BY SUBJECT, OFFERED IN CHICAGO PUBLIC HIGH SCHOOLS IN MARCH 1964

Subject	Honors Classes	Honors Telescoped Classes	CEEB A. P. Classes	City Junior College Classes
English	482	6	10	8
Mathematics	210	24	12	5
Science	172		10	1
Social Studies	180	1	15	
Foreign Language	44		1	
Business	4			
Art-Drafting	9			
Total	1101	31	48	14
Total Number of Classes				1194

Special High School Interest Groups. The curriculum in the Chicago public high schools provides expanded opportunities for able and talented students to explore and develop their interests and talents in art, music, the performing arts, business, home economics, and industrial arts.

In each of these areas, there are foundation courses and advanced classes providing high level opportunities for expression. All high school students are required to present a unit of art and a unit of music in order to complete requirements for graduation. Many times, the experiences which a talented student receives in the basic art or music classes impels him to elect advanced courses in these fields.

At present, there are seventy-two advanced art studio classes for the gifted offered in forty-six general high schools. These classes, which meet daily for a double period, offer high level study in painting, graphic arts, sculpture, advertising arts, and costume design. In March 1964, there were 1800 talented students enrolled in these classes. There is opportunity for student exhibitions, not only in the individual school, but in each of the twenty-one annual district art fairs. This year, for the first time, student artists from the Chicago public schools exhibited in the Art Institute of Chicago.

Each high school has either an orchestra or a band organization; many support both types of instrumental groups, as well as other small instrumental ensembles. In addition, all high schools have choral organizations with many supporting three or four varied groups such as symphonic choirs, boys' or girls' choral societies, and madrigal singers. The scope and variety of musical groups in the Chicago high schools is impressive. In March 1964, there were 5400 talented students enrolled in instrumental organizations. Another 5000 students participated in various choral groups in the high schools.

Opportunities for expression are plentiful. Most high schools report at least two to three concerts by instrumental and choral organizations during the school year; many high schools report the presentation of a light musical operetta in which both choral and instrumental groups participate.

For those high school students who are highly gifted in music, an all-city band and an all-city choral society offer additional and outstanding opportunities.

Motivation and Recognition of Gifted Students. Gifted students in the Chicago schools are given recognition and motivated toward high achievement by membership in honorary societies, special interest clubs, or school organizations limited to talented or able students.

In the high schools, the foremost honorary organization toward which students aspire is the National Honor Society. Most Chicago high schools sponsor a chapter of this national society. Membership is limited in the local school chapter to outstanding senior students. In addition most schools report that they maintain honor clubs or societies in order to recognize general academic achievement by able students in grades 9, 10, and 11.

Among other national honorary societies which schools report are Mu Alpha Theta Society which offers membership to students who display outstanding ability and interest in mathematics, the Junior Scientists of America which recognizes gifted student scientists,and the JETS or Junior Engineering and Technicians Society which selects students interested in engineering or technical studies. Other national honorary groups are the Quill and Scroll Society, an honorary journalism organization, and the Tri-M Society, an organization for talented musicians. Creative artists are given opportunity to exhibit in the National Scholastic Awards art exhibitions which are held in a local department store. In 1964 approximately five hundred gifted student artists received gold key awards and certificates from this organization.

There are numerous co-curricular activities in all schools which foster the interests of the gifted and talented. Creative writing groups, school publications, debating teams, Great Books discussion groups, drama clubs, history seminars, foreign language groups, science fair clubs,and subject interest clubs in almost every area of the curriculum represent the many diversified and stimulating activities open to able students. Representing highly specialized interests are student organizations such as the biology club, astrophysical society, pre-medical society, astronomy club, rocket club,and the slide-rule club.

Creative writers find many opportunities for expression through the medium of school newspapers, school year books,and magazines devoted to creative writing and art. All schools report the maintenance of a school newspaper and most report that they issue a yearbook. An interesting development is the growth of journals of creative writing and art in the high schools. Fifteen schools issue such a magazine which represents the best of creative writing and art. Other schools encourage creative writing by devoting portions of school newspapers to such materials.

Many gifted students find satisfaction in participating in service and civic interest organizations. The student council in the school offers opportunities for leadership by gifted students. Chapters of national organizations such as the Future Teachers of America, Future Nurses of America,and Future Doctors of America offer opportunity for vocational interest and service. In some schools, members of the Future Teachers of America serve as members of tutoring groups. Other local school organizations such as the college club assist in the organization of college or careers days in the schools.

Counselors, teachers and principals encourage gifted students to enter local, state,and national subject content contests, as well as to participate in state and national scholarship examinations. This encouragement is given both in individual interviews and during group conferences.

Most schools grant special recognition to their able students through special honors assemblies. Some schools report that they award academic letters similar to athletic letters and that they give honors students priority in attending special events, registering for classes, and participating in special service opportunities.

Weighting of Grades

While honors classes are geared to challenge gifted and able students who plan to attend college, all regular academic classes taught in the Chicago high schools offer quality preparation for the college bound. Some students of ability, despite counseling, do not elect honors classes for reasons such as lack of home motivation, fear of scholastic competition, or a heavy work schedule.

To encourage able students to enroll in honors classes, a uniform system of grade value points for class rank has been established on a city-wide basis. Because of emphasis by colleges and universities on class rank for admission, the weighted grade points given for enrollment in honors classes will have the effect of increasing enrollment in honors and advanced placement classes. The following scale illustrates the weighted value of grade points in determining class rank:

Grade	Advanced Placement	Honors	Regular	Essential
A	6	5	4	
B	5	4	3	2
C	4	3	2	1
D			1	1
F				0

A student doing "D" level work in honors and advanced placement may be transferred into a regular class following counseling with him and his parents. When this is not advisable or technically feasible, the student may remain in the honors class but the honors connotation for the "D" student is dropped and his grade recorded as earned in a regular class. Careful selection of students for honors and college level classes minimize this occurrence.

Foreign Language Study

Long considered as a means of enrichment for gifted pupils in the elementary grades, foreign language study has now achieved the status of a continuous and sequential program in the elementary schools of Chicago. Because efficient performance in the language arts area is given a high priority, foreign language instruction in the elementary school is primarily a curriculum area for students who are able or gifted in language arts. Only those pupils whose language arts achievements are above grade level are grouped for foreign language instruction in elementary schools where it is taught.

Emphasis upon quality in education has been reflected in improvements in the teaching of foreign language since the program was described in the 1959 report on the gifted. Some of the changes are the continuity of study made possible by the annual admissions plan, emphasis upon oral-aural proficiency, improved curriculum guides and materials, utilization of electronic equipment, varied types of learning materials, greater articulation between elementary and high school foreign language programs, expanded in-service education, and increased consultant services.

The most impressive trend in foreign language instruction has been the increase in the number of pupils studying foreign languages and the number of elementary schools offering such instruction. In 1956 there were 2732 able and gifted pupils studying foreign language in forty-five elementary schools. By 1963, this number had increased to 13,159 pupils, of whom 3994 were enrolled in foreign language classes in the seventh and eighth grades. Table 7 on page 30 pictures the growth of the program from 1956 to 1963. It also indicates that organization of classes in foreign language proceeded at a rapid pace from 1956 until the peak year of 1961 when 210 elementary schools offered foreign language instruction to 23,124 pupils. At that time, a representative staff committee reviewed the total program of foreign language instruction in the schools and recommended a series of measures designed to strengthen the teaching of foreign languages. Hence, the sharp cutback in 1962 of the number of schools offering foreign language study reflects a greater emphasis upon quality in instruction rather than in number of pupils in the program.

The recommendations made by the foreign language survey committee established certain procedures and policies which are now characteristic of the program. Oral-aural communication is now considered the primary aim of elementary school foreign language instruction. In order to achieve this competency, emphasis is placed on a six-year foreign language program beginning in seventh and eighth grades. Table 8 on page 31 shows the foreign language enrollment by language in seventh and eighth grades, for the school year of 1963-64. The most popular language is Spanish, followed closely by French. There are a few classes in German and Russian. Italian and Latin which were offered in the upper grades in 1959 are not taught any longer in these grades.

Foreign Language Study in K-6 Grades. Approximately 9100 able or gifted pupils in primary and intermediate grades were enrolled in foreign language groupings in elementary schools during the school year of 1963-64. Most of the programs at this level are offered in Spanish and French, although there are a few classes in German and Italian. These classes or groups are taught by 160 classroom teachers, who as part of their regular class load, teach one or more classes in modern languages.

While emphasis has been placed on the six-year language program beginning in the seventh grade, nevertheless the K-6 phase of the elementary foreign language program is not a complete unit in itself. Rather, it forms part of a continuous sequential plan which is necessary for attaining mastery of a second language in school.

To assist teachers, structured basic materials have been provided through the Department of Curriculum Development. Curriculum language

Table 7

GROWTH IN ENROLLMENT AND NUMBER OF SCHOOLS OFFERING FOREIGN LANGUAGE INSTRUCTION, 1956 to 1963

Year	Enrollment	Number of Schools
1956	2,732	45
1957	4,550	93
1958	7,111	129
1959	17,524	172
1960	20,945	186
1961	23,124	210
1962	15,027	181
1963	13,159	138

guides for primary and intermediate grades include suggested teaching techniques; sample lesson plans as well as materials in the form of dialogues, narratives, and poems; plus listening comprehension and speaking tests. To accompany the guides, there are sets of sketches as well as sets of tapes recorded by native speakers. For the French programs, there are slides taken in France which illustrate some of the narratives in their cultural setting.

In addition, teachers utilize the mobile electronic laboratory carts which are available in all elementary schools where foreign language is taught.

Nonquota Teacher. With the emphasis in foreign language study on the continuous six-year program which begins in the seventh grade and continues into high school, the teacher of language in the upper grades assumes an important role. At present, there are thirty-one nonquota specialist language teachers assigned to upper grade centers and to elementary schools which have large seventh and eighth grade enrollments. Nonquota teachers are regularly certified elementary teachers who have successfully completed the oral proficiency tape tests conducted by foreign language consultants in the Department of Curriculum Development. They are assigned to elementary schools for the purpose of teaching the foreign language without regard to the formal pupil-teacher ratio set for elementary schools. These teachers exhibit mastery and depth in the language which they teach. Several teachers of Spanish are bilingual. Others have advanced degrees and some have studied in foreign countries.

Six-Year Program. To achieve audio-lingual competency, pupils in the six-year program begin intensive study in seventh grade with a sequential series of foreign language learnings which place emphasis on listening and speaking skills which are fully articulated with high school instruction. All available time at the beginning is alloted to the primary skills of listening comprehension and speaking. Reading and writing skills are then built upon this solid base.

Table 8

FOREIGN LANGUAGE ENROLLMENT IN SEVENTH AND EIGHTH GRADES, 1963-64

Language	Seventh Grade		Eighth Grade		Total
Spanish	988	(34)[a]	1011	(35)	1999
French	930	(35)	880	(33)	1810
German	57	(2)	79	(3)	136
Russian	25	(1)	24	(1)	45
Total	2000		1994		3990

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[a] Indicates number of classes.

Much use is made of electronic facilities. All elementary schools in the foreign language program are equipped with a mobile electronic laboratory cart. The components constitute a tape recorder, a record player, a filmstrip slide projector, and jack boxes with head sets for small group listening. Through this equipment, teachers are able to provide material which has been presented in class in recorded form for additional pupil use in listening and repetition.

The linguistic approach in foreign language instruction demands that the first year of training be devoted exclusively to audio-lingual training. For this reason, no textbook is used. Following this stage, new types of text materials are used in audio-lingual training and also in reading and writing practice.

To provide adequate time for development and mastery of language skills, each foreign language class in the seventh and eighth grades is taught daily by the specialist teacher for a regular period of forty to forty-five minutes.

Articulation and Continuity. In order to secure mastery of a foreign language, pupils generally elect to continue the language studied in elementary school in high school. Thus if an elementary pupil elects a language in the seventh grade, he enrolls in that language at high school entrance, since the concept of the six-year plan in foreign language stresses continuity. A gifted pupil whose special interest is foreign language may continue the study of the language begun in elementary school for a six-year sequence and may start a second language at the high school level for a three-or-four-year sequence.

In September 1963, there were 280 able freshmen who entered high school and placed out on the basis of their proficiency in foreign language. These students were grouped into special classes where there was an advanced level of instruction. The six-year plan will become increasingly significant for gifted and able students as college level classes or advanced placement classes are introduced at the fourth year level in high school. In the advanced courses, the six-year foreign language student will enjoy an enriched curriculum in which he will obtain a high degree of proficiency in understanding an educated native speaker who is speaking at a normal speed or discussing a nonspecialized subject; he will be able to speak with reasonable ease, fluency, and correct pronunciation; he will be able to read with understanding and appreciation representative literature; and he will be able to write freely and accurately on subjects that fall into the range of his experience.

Chapter III

CURRICULUM FOR THE GIFTED AND TALENTED

Providing sequential and meaningful learning experiences is at the very heart of the curriculum for the gifted in the Chicago public schools. The task of planning, preparing, and publishing curriculum guides is that of the Department of Curriculum Development.

In its assignment of providing curriculum materials for every grade and school level, the Department of Curriculum Development makes significant adaptations for the gifted student. These adaptations are found in all K-12 sequential and spirally organized curriculum guides which are keyed to the varying levels of students including the academically able and talented, the average-paced student, and the slow learner.

Staff Study Reports

During the past decade, reports prepared by staff committees have offered impetus and direction for the design and revision of curriculum offerings. These representative committees, composed of teachers, administrators, and university consultants, have studied the Chicago public schools at every organizational and subject level. Some of their reports, such as *Elementary Education in the Chicago Public Schools*, *Tentative Report on Secondary Education*, *Report on the Summer School Program*, *Report on the Program for the Gifted Pupil*, and *A Second Look at the Program of Education for the Gifted*, have exerted a strong impact upon the curriculum for the gifted in the schools. In 1957 and in 1959, the reports on the programs for the gifted emphasized the need for curriculum guides keyed to the academically able as well as to other students. The *Tentative Report on Secondary Education*, issued in 1957, called for strengthening and broadening of the total program of secondary education. It emphasized organizational provisions for the wide range of abilities among students through curriculum adaptation. The *Report on the Summer School Program* issued in 1959 recommended the expansion of summer honors classes and the organization of seminars and workshops for gifted students. These recommendations have been implemented.

Curriculum Guides

Curriculum guides covering all subject areas and grade levels from kindergarten through twelfth grade are available to all teachers in the Chicago public schools. Written by teams of teachers, administrators, and curriculum consultants under the supervision of the Department of Curriculum Development, the guides afford a spiral and sequential series of content and learning experiences, based upon the most recent and best scholarship and educational methodology.

Because of their importance in forming the structure for class instruction, curriculum guides are designed as practical teaching aids to teachers. Subject matter is treated sequentially in accordance with grade levels. Learning experiences, keyed to the varied abilities of students and classes, provide direction for the able as well as the slow student. An outline of the content to be studied is included in each unit of the guide. Goals or objectives are listed for each unit. These are developed in terms of concepts or generalizations.

At the elementary level, the curriculum guides assist the teacher by providing appropriate learning experiences and suggesting content materials arranged in accordance with the needs, interests, and abilities of pupils. Because of the wide variety of suggested learning activities and the considerable range in the vocabulary of books listed for each ability level, elementary teachers may select appropriate activities and books for the gifted in their classes.

All general curriculum guides in the high schools are keyed to levels of student ability. Each unit in each guide contains specific activities and suggested books for the able, the average, and the less able students. This design permits the high school teacher to provide an individual approach in teaching each student.

In addition to the keyed activities for able students in the general high school curriculum guides, special curriculum guides or parts of guides have been prepared for advanced placement or college level classes in English, mathematics, science, and social studies. Some of these guides are Regular and Honors English in the Secondary School, Suggested Readings for Honors English Programs, High School Mathematics: Honors and Advanced Placement Program, and Teachers Guide: Advanced Chemistry.

Curriculum guides are reviewed and evaluated on a four-year review cycle set up by the Department of Curriculum Development. As they undergo revision, the guides are reviewed by committees of teachers, curriculum consultants, and administrators; professional consultants from universities contribute their specialized knowledge. During the past decade, 300 university consultants from 55 universities have advised curriculum committees in the development and organization of curriculum materials and have reviewed revised guides for possible changes before they were printed for distribution to teachers.

Since 1958, all curriculum guides in the academic subject areas have been reviewed and revised. Moreover, guides have been prepared for those subject fields where none existed before. In the area of foreign language, K-12 guides have been developed in French, German, Italian, and Spanish. Because of the methodological and technological changes in the teaching of foreign language, these guides have been invaluable to teachers in this program.

As part of the regular review cycle, committees are reviewing curriculum materials at the present time, and, in addition, other committees are developing such new materials as Criteria for Evaluation of Instructional Materials in Specific Subject Areas, Guidelines for Initiating Experimentation and Innovation Projects, and Guidelines for Team Teaching. All of these committee reports have implications for the improvement and adaptation of the curriculum for the gifted.

Many leaflets and brochures of an informational nature are prepared and issued by the Department of Curriculum Development. An informative series of leaflets issued under the title Quality Education has included one in science and one in mathematics, which describe, among others, the program of education for honors students in science and in mathematics. These have been released to the schools for distribution to teachers and parents. Other leaflets in this series will describe programs in English, social studies, and foreign languages at all levels. Administrators have utilized these leaflets in staff meetings and conference meetings with parents.

Of interest to elementary teachers and administrators is the publication entitled The Story of the Special Summer Schools. This brochure which was planned in conjunction with the development of a filmstrip describes the curriculum activities of the ten special elementary summer schools in 1963 in which pupils made dramatic gains in achievement levels. Because of the grouping practices employed in these special summer schools, able and gifted pupils from disadvantaged community areas participated in many enriching and challenging experiences. The implications for nurturing the talented disadvantaged pupil in the regular elementary school program have been skillfully presented in this brochure.

Another recent publication issued by the Department of Curriculum Development is the Guidelines for the Primary Program of Continuous Development. Because the continuous development program is an individualized nongraded curriculum plan, a gifted pupil may progress at his own rate in the skill areas of reading and arithmetic. This booklet describes programs of continuous development for the primary grades, sets up learning levels, and suggests appropriate study materials. Since there are many possibilities in this approach for gifted and talented pupils, this booklet offers guidance to school staffs as they plan such programs.

Consultant Services

Consultants assigned to the Department of Curriculum Development are especially helpful to teachers and administrators who are planning programs of education for the gifted. At present, in the five curriculum areas of language arts, mathematics, science, social studies, and foreign languages, there are a total of thirty-five consultants who are available for assistance to the schools.

At the city-wide level, consultants are concerned with the development and utilization of curriculum materials, curriculum committee assignments, experimental and special projects and with the securing and implementation of federal, state and foundation grants. At the district and local school levels, consultants participate in district and local school in-service workshops; assist teachers and administrators in selection and utilization of books, materials and equipment; and confer with teachers and faculty committees. They also assist in promoting articulation between the elementary and the high school in the major academic subjects and aid high schools in setting up advanced placement classes. The special curriculum guides being prepared for use in advanced classes in English, biology, chemistry, physics, and mathematics represent a phase of curriculum adaptation with which the consultant is concerned.

Metropolitan Chicago offers many exciting opportunities for cultural enrichment for school children. Especially are these opportunities important for children of high potential in disadvantaged areas who need the stimulation and motivation afforded by these cultural activities. To coordinate cultural events and opportunities in Chicago with the learning activities suggested in the curriculum guides, a teacher coordinator for cultural activities has been assigned in the Department of Curriculum Development since 1962. Through bulletins, special notices, and the consultants, the teacher-coordinator informs schools of the many cultural activities available for students. These activities and functions include symphony concerts, theatre productions, lectures, dance recitals, special museum exhibitions, ballet, and the opera. Among Chicago cultural centers cooperating with the schools in this program are the Art Institute, the Goodman Theatre, Civic Theatre, Chicago Symphony Association, Ballet Theatre, the Lyric Opera, Ravinia, and the Kungsholm Restaurant Puppet Theatre. Free admission or low cost tickets are given to the schools for many of these functions.

Many schools have organized voluntary discussion groups of able and talented students following their visits to these cultural functions. One high school has organized a Junior Academy of Arts and Sciences, which meets biweekly to study and discuss the cultural activity which students have visited. Another school has formed an organization entitled the Beaux Arts Club which evolved as the result of a visit by students in an English honors class to a stimulating "live" play at the Goodman Theatre.

Special Projects

As part of continuing efforts to provide quality programs of education, the Department of Curriculum Development has sponsored a number of experimental projects in selected elementary and high schools. Among the projects which have reference for the gifted students are the following.

Chicago Experimental English Program

Started in 1961 with forty-five English honors classes in nine high schools, this experimental program is designed to improve the quality of English composition by emphasizing greater leisure-time reading, more writing experience for students, more time for student-teacher consultation, and greater opportunity for the student's evaluation of his own writing. With funds supplied by foundation grants, special reading centers have been set up in the nine schools for students enrolled in the program. The program utilizes the services of theme readers, lay persons who assist in the reading of themes, in order to provide more teaching time for instructors and more writing instructions for students. Qualifications for readers include a college degree and success in both a written and an oral examination. At present, twenty-two theme readers are employed in the experimental program.

Programmed Instruction

Experimental studies in programmed instruction have been carried on in schools since 1962. The first phase of this experiment included two elementary schools and three high schools which used selected programmed materials, both machine and text, in algebra, arithmetic, geometry, statistics, and electricity. Attitudinal studies involving parents, teachers, and administrators were made. Standardized tests, as well as achievement tests constructed by curriculum consultants, have been administered to students to determine effectiveness.

The second phase of programmed instruction experimentation is continuing with a study of the extent to which teachers request available programmed materials when they are relevant to their instruction and the ways in which teachers employ the requested materials in their classrooms. Two elementary schools and one high school are using programmed machines and texts in reading, mathematics, science, social studies, and study skills in this phase of the study. Data received from these schools are being processed now in the Department of Curriculum Development.

Modern Mathematics

Several research projects in the field of modern mathematics have been carried on in the schools since 1962. At the high school level, one project in modern first year algebra has involved a study of School Mathematics Study Group (SMSG) materials, the University of Illinois (UICSM) materials, and the Chicago public high schools curriculum. Another project involved an experimental class using SMSG materials and a control class using the Chicago public high school mathematics curriculum at the seventh, ninth, tenth, eleventh, and twelfth grade levels. This was part of a national research study, and schools and teachers were randomly selected by the coordinating center for the project at Educational Testing Service.

Since 1963, nineteen elementary schools have been participating in the use of nine modern mathematics programs. These schools have been selected on the basis of pupil and staff characteristics so that various learning outcomes associated with the various programs may be related to pupil and teacher variables. Among the materials used in this comparative project are SMSG, Madison Project, and the Greater Cleveland Mathematics Program.

State Supported Gifted Child Study Projects

As a participating member of the Illinois Plan for Program Development for gifted children, the Chicago public schools have received financial aid in conducting research studies concerning methods of evaluating programs of education for gifted pupils, methods of evaluating curriculum materials, and methods of fostering creativity.

Evaluation of Elementary Programs of Education for the Gifted

This project which was conducted in 1961 attempted to determine a valid method of evaluating elementary programs of education for the gifted. Approximately 800 gifted pupils in eleven elementary schools which maintained varying programs of education for the gifted were involved in this experimental study. Researchers found that this large sample of gifted children could be identified, equated, and tested; that after these data were gathered for this group that it could be compared statistically with a counterpart group in a school which had maintained a well-defined quality program of education for many years. Conclusions reached in this study indicated the feasibility of evaluating learning outcomes of a school's program for the gifted by comparing its pupils' achievements and other indices of success with their counterparts.

Evaluation of Curriculum Materials for the Gifted

In 1960, this study was initiated to develop a method of evaluating curriculum materials used in high school honors classes in English (grades 9-12) and mathematics (grades 9-12) as well as elementary English classes for the gifted (K-8). Teachers of honors classes in high school mathematics and English and of elementary English classes for the gifted were involved in an experimental evaluation process which included group dynamics techniques, tested principles of curriculum construction, and surveyed teacher judgments. Specially designed evaluation questionnaires were constructed which permitted teacher reactions to each major topic represented in the curriculum materials under consideration. To eliminate misunderstanding, curriculum consultants met with district superintendents, principals, high school mathematics and English teachers,and representative teachers from every elementary school. Completed questionnaires were returned by every school.

Findings of this study indicate that the consensus of teacher judgment is strongly favorable to curriculum materials for the gifted; that teachers with varying needs are able to utilize materials in the guides; that the use of questionnaires has been an excellent means of involving teachers in the study, use, and discussion of curriculum materials; and that this procedure has been an excellent source of in-service education.

Creativity Studies

Since 1960, studies conducted by the Department of Curriculum Development have included the area of the creatively gifted child. The general purpose these investigations has been to construct instruments for identifying the creative child and to develop instructional methods and materials designed to foster creativity in gifted pupils.

Chicago Public Schools Study in Creative Problem-Solving, 1961-62. In this study which was conducted in selected elementary schools, research workers,using pupil questionnaires and specially constructed tests designed to measure creative problem-solving abilities, identified three distinct types of gifted children: those children who scored above the median on a creative problem-solving test but scored below the median on a standardized test of general intelligence; those children who scored above the median on a general intelligence test but below the median on the creativity test; and those children who scored above the median on both instruments.

There was strong evidence that education means different things to these three types of gifted children. School appears to hold far less reward for the creatively gifted, low IQ problem-solver than it does for the creatively gifted student with high IQ.

Pupils, in general, in this study, indicate a favorable response to the use of the inductive method, especially in the form of "open-ended" thought questions.

This study has clear implications for changes in the use of learning materials, teacher training, and methods of instruction. Results of this study are being reflected in curriculum materials and in-service workshops

Chicago Public Schools Study in Creative Problem-Solving, 1962-63. During the 1962-63 school year, a further study was made of the three educational factors (namely, learning materials, teacher training, and methods of instruction)and of their effect upon programs of education for gifted children. A group of teachers, selected from those schools which had participated in the creativity studies during 1961-62, was organized to construct "discovery" materials designed to foster the development of creative problem-solving in the classroom. Teachers met for a full day workshop once a month. Materials were tried in the teachers' own classrooms and then discussed by the group during workshop meetings.

As a result of these workshops, various materials were devised for general classroom use. Near the end of the 1962-63 school year, these materials were selected for trial by twenty-five teachers from four schools on a voluntary basis. These teachers had no exposure to the material and had no special previous experience with concepts dealing with creative problem-solving.

Two important findings have emerged from the 1962-63 study of creativity. First, neither creative learning materials specially prepared by teachers nor carefully selected manufacturers' materials actually result in creative learning unless the material is compatible with the teacher's own style of instruction. Second, although the use of creative learning materials developed by participating teachers has little influence on the teaching practice of other teachers selecting and using the materials, they do sensitize teachers utilizing the materials to an awareness of the need for changes in their own methods if creative problem-solving is to be fostered in their own students.

In-Service Techniques for Encouraging Teachers to Use Methods Which Foster Creativity in Gifted Students,1963-65. The purpose of this project is to develop a teaching methodology conducive to the development of creativity in gifted children. It is expected that workable procedures will be validated for establishing in-service training programs which will foster increased pupil creativity. Teachers and pupils selected from grades three to eight in two public elementary schools are participating in this study. One school enrolls pupils from a disadvantaged area where pupil achievement levels may be one or two years below the average, and the other school has pupils whose family background is largely professional and managerial and whose achievement scores are well above average.

A series of weekly in-service meetings has been organized for teachers participating in this study. In these meetings teachers are sharing workshop experiences designed to give them an awareness of teaching methods which are compatible with creative problem-solving methods. These experiences include such activities as role playing and the development of experimental instructional materials and methods. Specially designed rating scales are enabling teachers in this project to judge the reaction of pupils in their classrooms and of other teachers to these materials.

At the end of this study, it is expected that new techniques and instructional materials will be made available to elementary schools for guidance in the teaching of creative problem-solving.

Chapter IV

DEMONSTRATION CENTERS FOR THE GIFTED

The program for the gifted in the Chicago public schools has received added impetus with the establishment of five demonstation centers for gifted children. The centers, located at Kelly High School and at Bell, Bryn Mawr, Carver, and Tesla elementary schools are supported in part by grants from the state through the Illinois Plan for Program Development for Gifted Children.

The major purpose of the demonstration centers is to provide teachers, administrators, and interested community leaders with the opportunity to visit and observe the effectiveness of instructional practices organized for the gifted in these schools.

A second purpose of the centers involves experimenting with materials, methods, or some facet of the program. The research section of the Department of Curriculum Development is responsible for the coordination and evaluation of the programs of the demonstration centers.

To guide and direct visitors through the demonstration centers, one member of the staff of each center has been designated. Individual brochures describing the organization and operation of its plan have been prepared for each center so that visitors may be informed. Learning materials, apparatus, and equipment which have been found to be effective in the instruction of the gifted are on display in the centers.

A Cultural Enrichment Program

Kelly High School has focused its efforts upon the identification of gifted students who are in need of cultural enrichment. Emphasis in the cultural enrichment plan centers upon the strengthening of written and oral communication and the simultaneous development of appreciation and understanding of the humanities and the arts.

Salient features of the Kelly gifted program are a tutorial English contract plan, a special English V program, a student academy of arts and sciences, and a faculty academy of arts and sciences.

The tutorial English contract plan consists of a sequential and articulated series of enriched learning experiences designed to promote effective written and oral expression.

The special English V program is a team teaching plan which offers additional instruction time and permits flexible scheduling of students and teachers. The student academy of arts and sciences provides for cultural enrichment activities such as attendance at plays, concerts, operas, and museum exhibits. The faculty academy of arts and sciences is involved in motivating total faculty interest in fostering study of the arts and literature.

Other aspects of this program include plans for the development of creative artistic skills, as well as mechanical and non-linguistic abilities. Involvement of parents in the program to improve the total learning environment is viewed as a part of the process.

A Team Teaching Program

Team teaching as an effective approach in guiding the learning of the gifted is emphasized in the demonstration center at the Bell Elementary School. Through the organization of curriculum teams, grade level teams, and department teams, a program of broad and varied educational experiences is provided for the gifted normal and handicapped children attending the Bell School. Among the gifted handicapped pupils served by this program are blind, deaf, hard-of-hearing, partially sighted, and multiply-handicapped children.

An accelerated curriculum geared for enrichment involves special projects utilizing a broad use of community resources. Special curriculum adaptations include group study projects at the Museum of Science and Industry, studies in the understanding of foreign cultures, the Junior Great Books project, independent library research problems, intensive foreign language study, speed reading experiences, controlled use of MPATI programs, and programmed learning.

Many of these special learning activities, or parts of them, are offered during the extended day and Saturday morning programs in the social center which is operated in this school.

In the primary grades, the continuous development program provides adaptation for gifted pupils in reading and mathematics. At the intermediate and upper grade levels, the gifted are homogeneously grouped by ability and special interests. Flexibility in the use of the staff is demonstrated in the administration of this program.

A Cultural Trace Program

Intended to demonstrate that gifted elementary pupils may handle abstract ideas with depth and understanding, the Bryn Mawr program in grades 4, 5, 6, 7, 8 is built around the great ideas of the western world.

Five classes of gifted students of high ability (IQ 130 or above) and high achievement (three to five years above grade level)are participating in a "cultural trace" of great ideas of the west. The ideas encountered in the Junior Great Books Program form the basis for library investigation and field experiences designed to discover how an idea has manifested itself in individual lives, government, literature, music, and art throughout the ages.

In addition, gifted students of grade 4 travel throughout the city in a "semester on wheels" in order to relate cultural phenomena of the city to special units of instruction on Chicago and urban life. Formal classes in mathematics and science continue at regularly scheduled morning hours. Field trips and lectures,given by guest speakers in the Chicago area, are given for the entire group while library investigation and written appraisals are done in smaller groups.

Observation of the groups involved in discussion, doing research, or writing appraisals is scheduled for visitors. Bibliographies of resource material used by students and detailed descriptions of field trips, concerts, and lectures are made available on a bimonthly basis with teacher and student evaluations of the contributions these activities make to the program. Major source materials for the teachers directing the groups are the Syntopicon and The Great Ideas Today.

A Primary Grade Program for Gifted Disadvantaged Children

The Carver Primary School demonstration center has been organized to provide for the education of gifted disadvantaged children living in relatively self-contained public housing. The school program consists in grouping children of superior ability so that one class of able children exists at each grade level in the primary school. The IQ of those children enrolled in the special classes ranges from 109 to 130. The teachers of these classes operate on a team basis to provide specially constructed material and methodology aimed at increasing motivation in all of the major subject areas with special emphasis upon language arts. Pupil experiences include supplementary reading materials and the formation of special interest groups. To broaden and enrich the experiences of these children a carefully constructed program of out-of-school experiences including field trips to museums, parks, and art galleries is planned by teachers and related to a special instructional program conducted during the regular school day.

The strengthening of school-parent relationships is aimed at educating parents to the realization of the giftedness of their children and to the home conditions which such giftedness warrants. Parental involvement in the gifted child program includes such activities as conferences with the field psychologist and other consultants, participation with children in in-school and out-of-school field trips, and special home activities suggested to the parents to increase the out-of-school learning activities of gifted children. Parents are encouraged to take children on independent trips, attend concerts, visit the library, and help children develop hobbies to stimulate new interests.

A Continuous Development Curriculum for Gifted Disadvantaged Primary Pupils

The demonstration center at the Tesla Elementary School has been organized to identify and expand the potential of disadvantaged gifted primary pupils and to promote their optimal development. Featured in this center are experimental patterns of vertical and horizontal organization as well as cooperative teaching practices and new classroom management techniques and instructional materials.

Through the continuous development program, which is a nongraded vertical plan of organization, gifted primary pupils progress sequentially in the skill areas of arithmetic and reading at their individual rates. As they proceed through the continuous development program, pupils also work in the fields of language arts, science, social studies, music, and art as presented in the curriculum guides. Pupil study in these areas is related to improved forms of written and spoken communication.

With the use of electronic sound equipment, the speech therapist and classroom teachers cooperate in improving pupils' oral communication with emphasis placed on "standard American English."

Horizontal organizational arrangements within the continuous development program have provided for grouping of gifted pupils, curriculum adaptation for their needs, and cooperative teaching arrangements.

Selection of gifted pupils for this program is based upon reading achievements, mental age, social maturity, and physical maturity. Included in the group are the potentially gifted children. These pupils have been identified by an analysis of their group intelligence tests in which they scored exceedingly high on some subtests but actually received little or no credit on other subtests. In addition, teacher judgment concerning social maturity, ingenuity in problem-solving, special interests, and displays of unusual ability are also considered in the selection of these potentially gifted pupils.

Cooperative and team teaching practices are utilized by teachers in sharing and evaluating instruction and classroom management, as well as pointing up the special abilities of children. Through frequent meetings and conferences, teachers are devising new curriculum and instructional experiences with emphasis placed on the need for these gifted pupils to develop positive attitudes toward themselves and the school.

The psychologist assigned to this program is also working with the teachers on a team basis and conducts individual and small group sessions with pupils. To encourage parents to create a home climate conducive to maximum emotional and mental growth of their children, individual conferences and group counseling sessions are held with them by the staff of the center.

Chapter V

GUIDANCE SERVICES FOR THE GIFTED AND TALENTED

Through a sequential and continuous program of guidance services, every child in the Chicago public schools is assisted in realizing his full potential. In the counseling provided for him in the schools, he is made aware of his abilities and aptitudes, assisted in planning his program of studies, informed of available educational and occupational opportunities, and helped in planning for the achievement of realistic and worthwhile goals.

While the recognition of these guidance needs is appropriate for all children, they apply particularly to the gifted. Because the gifted child is endowed with high level abilities or special talents, he not only needs the guidance services available for all pupils,but he may be in greater need of additional counseling services. In the broadened program of enrichment sought for the gifted, this additional guidance service forms part of an enriched guidance approach.

To meet the needs of all pupils in the schools, the program of guidance services has steadily expanded since 1953. During the past decade, the number of counselors in the high schools has increased from 135 in 1953 to 280 in 1964. To serve students in the upper grade centers 42 counselors have been assigned to those schools.

At the high school level, the counseling and guidance services have been reorganized since 1959 to provide continuous counseling for each student. Instead of a function-organized type of counseling, each counselor has a number of students assigned to him for their four-year stay at high school. For the gifted student, continuous counseling offers him the opportunity to build a close and continuing relationship with the counselor. It allows him to confer readily with his counselor and to formulate long-range educational plans in terms of his interests and special abilities.

Guidance Services in the Schools

In the elementary school, the adjustment teacher provides the necessary guidance services for children beginning with the testing function. Here, the gifted child is identified early and plans are made for his growth and development in terms of his potential.

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Together with his classroom teacher, the adjustment teacher aids the gifted child to discover his abilities, explore his interests, and find opportunities to display his talents.

The early identification of the gifted child's abilities and achievements is made possible by the city-wide electronically scored testing program. The information derived from the standardized tests administered by the adjustment teacher in grades 1, 3, 6, and 8 and the high school counselor in grades 9 and 11 furnishes the basis for the educational and occupational plans of the gifted child. Assisting in this planning are the adjustment teacher and the high school counselor who assemble a variety of information, administer the tests, and interpret the test scores to the gifted child, his parents, and his teachers.

Parent interview day marks the culmination of the elementary guidance service program. Organized jointly by the elementary and high school, parent interview day in the Chicago public schools is designed to inform the eighth grader of the opportunities offered in the high school. On that day, the pupil, accompanied by his parents, confers with the adjustment teacher, the high school counselor, and his elementary school principal. His elementary record is reviewed and his abilities, interests, and aptitudes discussed in terms of his high school plans. For the gifted child, this conference and subsequent follow-up by the high school staff is helpful in guiding him into honors classes, advanced laboratory science classes, and in his selection when appropriate for the "100" top scholar program in the high school.

In preparation for his entrance into high school, the eighth grader is guided by adjustment teachers and upper grade counselors using resource units and booklets developed by the Bureau of Pupil Personnel. Guidance materials such as What Next for the Eighth Grade Graduate?, High School Will Be Different, High School Is a Job, and High School Should Be Fun present an overview of high school life, its responsibilities, and its opportunities. For the gifted eighth grader, these booklets offer information in regard to college attendance, scholarships, and life careers in the professions, industry, and business.

In high school, the continuous and personal relationship which the gifted student maintains with his counselor assists him in his plans of self-fulfillment. The gifted student needs special guidance, for he is generally faced with a greater number of alternatives as he progresses through school. The chief concern of the counselor is that his counselee think through his problems, evaluate his course of action, and examine the consequences of his decisions.

Another concern faced by counselors in guiding gifted students is the task of helping them to establish realistic limits to their ambitions. Because gifted students tend to have many interests, they may find themselves over-extended in a variety of activities or pursuing a single line of endeavor to the exclusion of all others. Counselors guide their gifted counselees in understanding when they can expand their endeavors or when they should limit their activities.

In guiding his gifted students, the counselor refers to the student's cumulative folder. This folder, which is organized when a child enters the Chicago public schools for the first time, contains test records, achievement data, anecdotal materials, autobiographies, health records, and interest inventories. The cumulative folder is an integral part of effective guidance since it is utilized constantly by the counselor and other school personnel to evaluate the student's progress and to plan high school and college programs.

Informational Services

Many methods are used by counselors in high schools and upper grade centers to inform students of educational and occupational opportunities. Some of these activities are the individual counseling interviews and conferences, regularly scheduled group guidance sessions at the high school and elementary school levels, and the maintenance of a library of college catalogs or guidance and occupational books such as Lovejoy's College Scholarship Guide in the counselor's office and the school library. The counselor also organizes college information conferences (assemblies devoted to career and college information) and sponsors college clubs or special interest groups limited to students of high ability. To motivate further interest in college attendance, the counselor plans visits to nearby colleges and universities and encourages able students to attend careers conferences held under auspices of institutions of higher education. The counselor also may regularly meet with special interest groups such as Future Teachers, Future Nurses, Junior Engineering and Technicians Society, Future Scientists, and the National Honor Society Chapter.

Counselors also hold individual and group guidance sessions for gifted and able students to inform them of the scholarship opportunities available through the National Merit Scholarship Qualifying Test, the Scholastic Aptitude Test, and the American College Test. Information concerning these tests, as well as other scholarship tests, is publicized; able and gifted students are encouraged by counselors, teachers, and principals to take these tests because of their many scholastic benefits.

Parent Conferences

One of the fundamental tenets in planning a program for the gifted is the participation and cooperation of the parent. All schools reporting in this survey involve parents of gifted children in varied individual and group conferences. Generally, parent group conferences are held at least twice a year. Some topics discussed in the group conferences are the initial identification of giftedness in a student; failure of gifted students to achieve in relation to ability; orientation activities to kindergarten, high school, college, and special programs for the gifted; and articulation activities such as parent interview day. At these meetings, parents are given copies of guidance publications which have been mentioned previously. For example, another publication After High School, What? is used for discussion purposes with parents of third-year high school students after they have taken their standardized tests. This booklet spells out in detail the costs of higher education and the need for further education, and it offers suggestions for collegiate education in the Chicago area.

College Conferences

Parents are also included in the college conferences which are intended to motivate students as well as provide specific information for them. Representatives from various colleges attend the conferences in individual high schools and present specific information on their respective college programs, tuition, scholarships, admission standards and procedures, housing, and campus life.

In 1963, all general high schools and two vocational high schools held either a college day, a college night, or a series of daytime individual interviews with college representatives. In each of nine high schools, fifty or more colleges participated; one high school had representatives from 168 colleges.

While most of the schools opened the conferences to junior and senior students and their parents, six high schools invited students from all year levels to participate. Parent attendance at college conferences is becoming increasingly significant; of four hundred persons attending one college night conference, two hundred were parents.

Referral Services

A final guidance and counseling activity affecting the program for the gifted is the referral service available to counselors. In addition to services offered by community organizations and agencies, there are a number of services offered in the Chicago public schools which are helpful to counselors in working with students and parents. These services include health and psychological assistance. In 1963, the Bureau of Child Study had 113 psychologists who examined school children and served as consultants to teachers and administrators in interpreting results of their findings.

During the 1963 calendar year, the Bureau of Child Study provided complete psychological evaluations for a total of 16,950 children, 221 of whom had been referred by their local school because they had been identified as mentally superior or gifted.

Follow-Up and Evaluation Program

An important facet of the guidance program for gifted students is that of follow-up. It is important for school personnel to know what happens to their gifted students, as well as the other students, and to be able to evaluate the efficiency of their services. For many reasons, it is difficult to obtain this information for students who have graduated from school.

For those students who have gone to college, individual conferences, questionnaires, planned group meetings, calls to the college, and written reports from colleges and universities disclose information of a useful follow-up nature. Many colleges report grades of college students to their high schools as well as scholastic honors won by these students. Representatives of colleges visiting the high school try to report on the status of high school alumni attending their college.

Chicago public school personnel have taken part in the high school articulation conferences sponsored by the University of Illinois, both here in the city and downstate. This has been one source of follow-up by which the high schools reexamine their programs of instruction and guidance in light of the experiences of their graduates at the university.

Scholarship Awards

An important outcome of the expanded counseling and guidance program in the high schools has been a consistent and steady rise in the number of financial aid and scholarship awards granted to high school graduates of high ability. In 1963, scholarship awards were won by one or more students from each high school.

In 1963 there were 2,193 scholarships awarded to 1,544 students. This represented an increase in 1963 over 1959 of 310 awards and 195 recipients. Table 9 on page 52 summarizes scholarship awards for the past five years.[1] These awards are a compilation of local and state awards, as well as scholarships granted by colleges and universities. Table 9 also indicates that, when recipients of scholarships for 1963 are related to those students planning full-time school, 16.8 per cent of this group, or roughly one in six, had been granted financial aid or a scholarship.

From the table on page 52, it is evident that there is a steady growth of both awards and number of recipients. In 1963, the number of awards was five per cent higher than in 1962, and the number of student recipients was eight per cent higher than in 1962.

Of the 2,193 scholarships awarded in 1963, 482 were granted by educational institutions, and 1,711 were granted by noneducational organizations, the latter group increasing the number of its awards each year.

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[1] Board Report No. 72051-H, "Annual Report of Financial Aid and Scholarship Awards," March 11, 1964 (in the files of the Board of Education, City of Chicago).

Colleges and universities making awards to Chicago students numbered 129. The total awards granted by these institutions amount to 451.

Table 9

SUMMARY OF FINANCIAL AID AND SCHOLARSHIP AWARDS
1959 to 1963

Category	1959	1960	1961	1962	1963
Total number of awards granted	1883	1860	1866	2093	2193
Total number of students granted awards	1349	1323	1349	1427	1544
Per cent of graduating class who planned full-time school attendance	48	49.3	53.6	55.9	55.1
Financial aid award recipients as percentage of graduates who planned full-time school	17.8	14.9	13.6	15.0	16.8

Of these schools, the University of Chicago awarded 51 scholarships; Knox College, 28 scholarships; Illinois Institute of Technology, 23 scholarships; Northwestern University, 19 scholarships; and the University of Illinois, 18 scholarships.

Exclusive of 482 educational institutions granting scholarships were 213 associations, organizations,and individuals who granted 1,642 awards. The largest number of scholarship awards (813) was given through examination by the Illinois State Scholarship Commission. State of Illinois Teacher Training Scholarships were granted to 232 students. The Pullman Foundation awarded 81 scholarships.

National Merit Scholarship Awards

Merit semifinalists are selected on the basis of their performance on the National Merit Scholarship Qualifying test. The semifinalists group is composed of the highest scores in each state and the selection score is obtained for each participant by totaling his standard scores in each of five subtests. The Illinois cutoff score in 1963 was 146.

In Illinois there were 723 semifinalists, an increase of 13 per cent over the 629 semifinalists in 1962.

In the Chicago public high schools there were 83 semifinalists in 1963-64 as compared to 77 in 1962-63. Ten high schools had four or more semifinalists, and of these, three schools had ten semifinalists each. In addition, 288 students in the high schools received letters of commendation for their high performance on the Merit tests. This special group scores immediately below the semifinalists and their performance is characterized by the National Merit Scholarship Corporation as showing "evidence of unusual academic promise." Within the top one per cent (99th percentile) of the nation's Merit group consisting of 13,200 semifinalists, Chicago public high schools are represented with 141 students for 1963.

Chapter VI

SCHOOL-COMMUNITY COOPERATION FOR THE GIFTED

Many community leaders, institutions, and organizations have joined with the Chicago public schools in offering special programs of education for the gifted and talented. Some of these programs represent cooperative projects between the schools and volunteer service groups or business and industry. Other cooperative arrangements have been made with cultural and scientific institutions in the city. Professional groups, civic associations, and metropolitan newspapers have also provided motivation and recognition for the gifted.

The Junior Great Books Program and the Junior League

The Junior League of Chicago has co-sponsored the Junior Great Books program in selected elementary schools since February 1964. In this program, two trained volunteers are assigned to each of ten discussion groups, each group numbering from ten to fifteen fifth, sixth, seventh, or eighth grade children. Discussion groups meet biweekly from 3:30 to 5:00 p.m. in those schools which are already open as social centers. To defray the cost of the books by participants, the Junior League has contributed $700.

The program is now in operation at the Alcott, Anderson, Doolittle, Goudy, Ogden, Shakespeare, and Stockton schools. A similar program is being conducted by the Board of Education at the Bell, Bryn Mawr, and Ray schools.

Because of the success of the Junior Great Books program in its first semester of operation, the Junior League has offered to double its volunteer participation in the schools in September 1964. This will enable the original seven schools to continue their program and will add six new schools to the program. The Junior League will provide thirty volunteer leaders and has indicated that it will contribute $1400 for the purchase of books.

Chicago Public Schools Student Science Fair

The effectiveness of Chicago public schools instruction in science and mathematics for the gifted may be seen in the complexity and variety of student exhibits entered in the annual Chicago Public Schools Student

Science Fair. In the fourteen years since the science fair was established by science and mathematics teachers as a student motivation project, the fair has emerged as one of the largest school science fairs in the nation.

Much of the success of the fair is due not only to the dedicated teachers and staff members who work with the student exhibitors but also to the encouragement and support given the fair by many Chicago commercial and industrial organizations. Through the efforts of the Business Education Advisory Committee, contributions, scholarships, and tours were given to student exhibitors in 1964.

To stimulate student interest in the science fair, a "kickoff" breakfast attended by gifted science students, guest scientists, and science teachers is held in each high school in the fall. The breakfast is followed by a school assembly in which the guest scientist addresses the students on a scientific topic.

In the 1964 science fair, there were 10,000 students who exhibited in local science fairs in their own schools; 2600 were chosen to participate in the twenty-one district fairs. From this last group, 300 students exhibited in the Museum of Science and Industry in the city-wide science fair; one hundred of these were gifted pupils from elementary grades 6, 7, and 8.

Distinguished scientists, educators, and technical experts from industry and Chicago area universities judge the student exhibits in the Museum of Science and Industry. In 1964, there were 120 such judges who served without remuneration in the all-city fair.

Opportunities for gifted science students to exhibit elsewhere are plentiful. Following the Chicago public schools fair, many Chicago students exhibit downstate at the Illinois Junior Academy of Science Meeting in Urbana, Illinois. In 1964, Chicago students won seventy-five per cent of the total awards in that meeting. Other students have exhibited in the Chicago Area Science Teachers Association Fair held annually in the Museum of Natural History. Chicago student exhibitors have also participated in the National Science Fair which is held in Baltimore, Maryland, where they have received national awards. In addition, student science exhibits are part of the annual Chicago public schools participation in the Illinois State Fair at Springfield.

Holiday Science Lectures

Sponsored by the Chicago Natural History Museum, the Holiday Science Lectures are presented in the Museum annually during the Christmas holidays. Students invited to attend the lectures are nominated by their teachers on the basis of the quality of their work in science. In 1963, there were 276 gifted high school science students who attended the series of lectures.

The Holiday Science Lectures are a series of lectures patterned after those lectures which have been presented in London each year by great scientists since the days of Michael Faraday, the founder.

In the Holiday Science Lectures, eminent scientists speak on a variety of scientific interests. In 1963, a distinguished teacher from the California Institute of Technology spoke on "The Origin of the Elements." Two hours of lecture and two hours of questions and answers composed each of the four sessions.

Annual Vocational Conference for Selected High School Seniors

In cooperation with the Chicago public schools, the Union League Club of Chicago has conducted an annual luncheon conference for outstanding high school leaders. Two boys and two girls from each Chicago high school who represent high achievement in scholarship, journalism, social studies, and public speaking are selected for attendance at this conference. Students participate in panel discussions dealing with varied topics. In 1964, the theme discussed by these gifted student leaders was "The Challenge of Citizenship."

Leadership Conference for Outstanding Sophomores

Another annual luncheon-conference for gifted students, sponsored by the Union League Club, is devoted to high school sophomores. The purpose of this conference is to have representative second-year high school leaders from every Chicago high school discuss topics related to civic and social responsibility. Students chosen for this conference have already displayed their potential in school and this experience is intended to give further scope for their talents. The theme of the 1964 conference was "The Pursuit of Excellence."

Annual Civic Assembly

The Civic Assembly is the high point of Chicago Youth Week which is observed annually by the Chicago public schools. Held in a centrally located hotel, the Civic Assembly program is conducted by the Chicago Junior Association of Commerce and Industry. Each high school is represented at the Civic Assembly by two senior students, a boy and a girl, who are leaders in scholarship and student activities. Following an inspirational talk by a distinguished leader in business, government, or education, each high school representative is given a civic achievement and scholarship medal. Capping the ceremonies is the presentation of scholarships to selected seniors by Chicago area universities.

Astro-Science Workshops

The Chicago Planetarium Society, Northwestern University, and the Adler Planetarium sponsored a series of astro-science workshops during 1963-64. The series of workshops offered gifted high school students the opportunity of studying under the guidance of eminent astronomers of the midwest. Thirty-five students in the tenth and eleventh grades from various high schools who demonstrated special ability in science as well as general academic ability were chosen for these workshops.

Annual Recognition Dinner for "100" Students

A large metropolitan newspaper sponsors an annual recognition dinner for the representatives of the "100" program enrolled in the Chicago high schools. Students invited to the recognition dinner are top scholars in the ninth, tenth, eleventh, and twelfth grades of the high school. Honoring the scholars are distinguished persons from the fields of industry, science, government, and journalism, as well as teachers and administrators of the Chicago public schools.

Art Institute of Chicago

Through the sponsorship of the Raymond Foundation, scholarships are available to talented elementary and high school students. These art scholarships enable the students to study art in special classes of the Art Institute which meet after school or on Saturday mornings.

For the first time in the history of the Chicago public schools a student art exhibit was held in the Art Institute of Chicago in 1962. Twelve major galleries were filled with the work of students gifted in art.

Each year many students participate in art contests, both local and national, and earn high awards.

Annually, each district in the city has a district art fair to which parents and the general public are invited.

The Junior Museum of the Art Institute offers facilities for the gifted elementary and high school art student to study art designed to meet his needs. The Junior Museum was opened in the spring of 1964 with an exhibition of art of the Chicago public schools.

Chapter VII

TEACHERS FOR THE GIFTED

Teacher Selection

The success of a program of education for the gifted is largely dependent upon the effectiveness of the classroom teacher. In selecting teachers for classes for gifted students, principals seek teachers who are enthusiastic about content materials, experienced, and interested in teaching the gifted. Though none of the principals listed any specific educational requirements for teachers of gifted students, most stated that the teacher himself should be an individual of high intelligence and broad background. Almost all mention the traits of adequacy and self-confidence as desirable. Principals write that a teacher of the gifted should be able to maintain his self-confidence while teaching pupils who may display specialized knowledge in specific areas of knowledge surpassing that of the teacher.

While no elementary principal specified the completion of formal university or graduate courses in methods of teaching the gifted, several mentioned that they considered attendance at workshops as one criterion in assigning teachers to classes for the gifted. Among other characteristics mentioned by principals in selecting teachers are the teacher's acceptability to new ideas, creativeness in teaching, flexibility, perceptiveness, the ability to maintain a sense of humor, and a willingness to work hard.

In short, the same traits or characteristics that principals find desirable in the teacher of the gifted are generally true of all good teachers.

In-Service Education

Not many teachers in their first year of teaching are fully equipped with pre-service education in the teaching of the gifted. To increase the competencies and skills of teachers, there are a variety of in-service experiences offered at all levels.

In the local school, principals and their staffs organize many challenging in-service activities. Among these are faculty study groups which meet regularly with the principal, adjustment teacher, and teacher-librarian; workshop sessions with curriculum consultants or supervisors; faculty committees which experiment with newer methodologies such as team teaching or varied grouping of pupils; faculty meetings; directed observation of master teaching; faculty library shelves; and the publication of in-service bulletins.

Some in-service programs are complex and extensive. Some schools adopt a study theme for the year and follow its adaptation in the school. Topics such as "individualized instruction" or "differentiation education" are some themes studied by faculty study groups.

Opportunities for in-service education are abundant at the district level. Committees of principals and teachers have organized workshops or meetings which involve many teachers from the entire district. Significant and successful district in-service programs held during the last few years have been in the fields of science, mathematics, language arts, and foreign language. Because these in-service programs have had well-known authorities as consultants, several districts have combined their facilities and resources so that more teachers could participate. A strong feature of the K-12 district organization is that elementary and high school teachers may meet to study problems of instruction such as the six-year program of foreign languages.

At the city-wide level, the Chicago Schools Journal, which is edited by the Chicago Teachers College South, is distributed to all teachers in the schools. It is effective in informing teachers and principals of current practices of teaching gifted students in the Chicago public schools. The articles are written by Chicago teachers and administrators, and a glance through the titles of some of the major articles that have appeared in this journal in the last years gives some indication of the pertinency of the material.

Science Seminars for Talented Students
An Academic Inventory of High Ability Standards
A Small Group Plan for Accelerated English Classes
Establishing Centers for Gifted Students
A Nongraded Program for Rapid Learners
Acceleration in First Grade for Selected Pupils
Providing for Gifted Children in Our Schools
Library Seminar for Gifted Students
Gifted Children Grow through Library Project
Great Books Program for Elementary Pupils.

Another city-wide in-service project undertaken by the Bureau of Research, Development, and Special Projects has succeeded in supplying a long-needed communications link of effective school practices to all Chicago public schools. The publication, Chicago Public Schools Report, published biweekly since September 1963, describes succinctly the effective methods and successful practices used in the schools of a single district in each issue. These reports are included in the agenda of many individual school staff meetings and provide discussion material for principals and teachers who are looking for effective practices and new ideas that may have bearing on their own school situation. Every one of the reports has included some information germane to the teaching of the gifted.

In 1962 and 1963, Charles E. Bish, director of the National Education Association Project on the Academically Talented Student, and his staff met with principals, counselors, and adjustment teachers from each of the twenty-one districts in the Chicago school system for a full day to discuss education of the gifted. Other services emanating from this project and affecting the in-service education of Chicago school teachers were consultant services on all phases of teaching the gifted and the distribution of an extensive series of publications dealing with administrative procedures and content areas especially important in programs for the academically talented students at the secondery school level.

A comprehensive "Administrative Workshop for the Gifted Child" was also held in 1962 in the central offices of the Chicago Board of Education. The workshop was conducted by Dr. James J. Gallagher, professor of education at the Institute for Research on Exceptional Children of the University of Illinois, and was attended by administrators, elementary school principals, and teachers from each of the school districts.

In 1963, Chicago Teachers College North received a grant of $26,073 from the Atomic Energy Commission and $1,700 from the National Science Foundation for the support of an in-service Institute in Nuclear Science for secondary school science teachers to be held during the school year 1963-64. The teachers who have enrolled in the Institute and have completed work in the fundamentals of atomic energy, radio-biology, radio-chemistry, and radio-physics have been supplied with demonstration kits which may be used in teaching nuclear science in their classrooms. Fifteen high schools now offer units in nuclear science as a result of this in-service education.

Workshops pertaining to the teaching of gifted students have received an enthusiastic response by Chicago teachers. During the summer of 1963, Chicago Teachers College North and the Department of Curriculum Development co-sponsored and staffed a three-week workshop in science and one in mathematics for kindergarten through grade three teachers. About eighty in each workshop were anticipated; enrollments were closed at 200 in science and 300 in mathematics because of limitations in numbers of available staff.

Since 1959, hundreds of elementary and secondary school teachers from the Chicago schools have attended guidance institutes, foreign language training institutes, science workshops, and mathematics institutes held under auspices of Title III of NDEA (teacher education). Many of these institutes have been held during the school year in various school districts. Others are held in universities throughout the nation during the summer.

A most effective and direct method of in-service education used in the Chicago public schools is the granting of fellowships each year to outstanding teachers. Since 1960, when the program began, more than one hundred teachers have been granted Board of Education Fellowships enabling them to attend such universities as Harvard, Stanford, Columbia, Rutgers, Purdue, Colgate, and the Universities of New York, Colorado, Maryland, Michigan State, and Hawaii.

Various foundation awards have enabled many teachers to plan their own in-service education programs. One award program, the Willett Awards initiated in 1961,has applied to sixteen Chicago teachers to date. In fact, total figures show that,in the summer of 1963 alone, 4,023 Chicago public school teachers studied for higher degrees in institutions around the world, including 166 teachers who studied on university fellowships, scholarships, and grants.

Voluntary professional organizations contribute a systematic overview of advances in the various disciplines which improve instruction for the gifted. There are numerous associations or clubs in which professionally minded teachers participate. They cover a gamut of activities.

Some of these organizations are the Chicago Biology Round Table; English Club of Greater Chicago; Women Teachers Mathematics Club of Metropolitan Chicago; Men Teachers Mathematics Association; Chicago Elementary Mathematics Association; Chicagoland High School Librarians Club; Chicago Elementary Press Association; Romance Language Society; Modern Language Association; Chicago Kindergarten-Primary Association; Chicago Council for Social Studies; and the Chicago Physics Teachers Club.

All these organizations attest to the vitality and interest displayed by teachers in the improvement of their instructional practices.

Chapter VIII

A DECADE OF PROGRESS IN PROVIDING FOR THE GIFTED

Many of the measures taken to improve the quality of education in the Chicago public schools during the ten-year period from 1953 to 1963 impinge directly on the program for the education for gifted and talented youth; many provisions for gifted and talented students are tangential to the regular program of education in that they enable the administrator to provide more completely for the special needs of these students.

General Provisions to Build a Quality Program of Education

During this decade, the following general steps have been taken to build a program of quality education in the Chicago public schools:

1. For the first time in one hundred years double shift classes have been eliminated in the Chicago public schools.
2. Class size in the elementary schools has been reduced from an average class size of more than 39 pupils per teacher in 1953 to 32.5 pupils per teacher in 1963.
3. On the recommendation of two staff study committees, the annual admissions and promotion plan has been initiated and implemented (1961-1964) in order to improve grouping of children for learning and teaching.
4. Reorganization of the administrative structure of the Chicago public schools into twenty-one districts, composed of one or more high schools and their contributing elementary schools, with each district totaling approximately 25,000 students, under direction of a district superintendent, has done much to articulate the elementary and high schools, stimulate educational experimentation, and improve the total program of education.
5. To provide expanded college opportunities for Chicago youth, the Chicago City Junior College has grown from three branches serving 8,700 students in 1951 to eight branches serving

almost 30,000 students in 1963; this is an approximate increase of 340 per cent.

6. With the assistance of foundation grants, Chicago Teachers College North was planned and organized. The new facilities on the north side of Chicago house a new and forward-looking program of teacher education.

7. To provide a more suitable program to meet the needs of seventh and eighth grade pupils, twenty-five upper grade centers and branches have been organized and developed; there were none in 1953.

8. Expanded federal aid through the National Defense Education Act of 1958 has provided not only partial funds for the improvement of instruction in science, mathematics, and foreign language, but also has provided audio-visual equipment, learning materials, in-service institutes, and rehabilitation and installation of science laboratories; in addition, NDEA funds have aided in the installation of twelve electronic language laboratories.

9. The expansion of city-wide testing in 1959 for grades 1, 3, 6, 8, 9,11, improved by electronic processing, has provided for continuous evaluation of the learning processes. In 1953, a variety of tests, hand-scored, were utilized for grades 1, 4, 8.

10. The summer elementary and high school program, placed on a tuition-free basis in 1955, has expanded both in numbers served and in the variety of programs offered, with enrollment rising from 12,732 students in 1955 to 74,144 pupils in 1963.

11. The importance of curriculum materials in the instructional program has been emphasized by making curriculum development a major department headed by an associate superintendent. New curriculum guides have been developed in subject areas for grades kindergarten through twelve. These guides provide teachers with well-organized, well-planned, significant content at a variety of levels which teachers must have to give each child the program of instruction which he needs.

12. A program of revision for curriculum guides has been organized on a four-year cycle. Outstanding teachers and administrators participate in reviewing and revising guides. More than 300 scholars in various disciplines representing 55 universities have served as consultants to curriculum committees since 1955.

13. Reorganization of guidance and counseling services in the high schools and upper grade centers has strengthened the program by providing continuous counseling for each student. In 1953 there were 135 counselors in the high schools; in 1963 the number of counselors in high schools and upper grade centers

had expanded to 322. The pupil-counselor ratio has been reduced from more than 700 to one to approximately 371 to one in the high schools.

14. Following recommendations of the staff committee on secondary education in 1957, the high school program of studies was strengthened by stipulating ten academic units of the total eighteen required for graduation - four units of English, three units of social studies, and three units of science and mathematics.

15. In-service education through television in major areas of the curriculum was instituted in 1958 for early morning viewing. These programs were viewed by hundreds of elementary and high school teachers.

16. A two-year junior college program has been presented on television. Many high school students view these programs for advanced placement credit.

17. Since 1953 more than 162 new school buildings and 100 additions to schools have been constructed; they constitute 38 per cent of all classrooms.

18. All schools have been provided with television receivers, film projectors, and FM-AM radios.

19. To experiment with full utilization of television, a pilot MPATI elementary school has been established in each of the twenty-one school districts. In addition, four associated network schools receive MPATI programs. All of these elementary schools and two high schools are participating members of MPATI. Each school installation is especially engineered for MPATI, ETV, commercial reception, and ultimately for closed circuit application. In addition, Chicago Teachers Colleges, North and South, are equipped with a three-track system which allows for ETV, prototype projection, and closed circuit transmission.

20. Experiments in team teaching are being used effectively to improve instruction both in the elementary and in the high school.

21. Since 1960 the organization of data processing technology in the central offices has contributed much to the building of a total information program.

22. The program of exchange teachers from other lands has given breadth and variety to Chicago education.

23. Since 1959, comprehensive guidance handbooks for high school counselors have included increased information for college bound students. In 1963, a new counseling guidance handbook for grades seven and eight was distributed to elementary schools and upper grade centers and one for grades 9 through 12 was distributed in 1964.

Specific Provisions for the Gifted and Talented

Provisions made specifically for gifted and talented students include the following:

1. The assignment of staff survey committees, assisted by university consultants, to study provisions for the gifted in the Chicago public schools resulted in the publication of the reports on the program of education for the gifted in 1957 and 1959. Recommendations made in these reports and placed into practice have done much to form the basis for the present program of education for the gifted.

2. The initiation of the "100" program in 1958 has enabled school staffs to identify and provide for the one hundred top-ability students in each high school.

3. In order to meet the varying needs of high school youth, each high school is now organized on flexible "track" plans to afford full educational opportunities for all students. "Track" grouping includes basic and essential classes, regular classes, honors classes, college level, and advanced placement groups.

4. Since 1962, outstanding students of the "100" program from each high school are recognized at an annual banquet held in McCormick Place. This recognition dinner is sponsored by a metropolitan newspaper.

5. In 1964 there are 27,975 high-level ability students enrolled in 1,194 honors classes in all curriculum areas in 53 high schools. In addition, 1,125 gifted students are enrolled in forty-eight advanced placement classes meeting College Entrance Examination Board requirements. In 1954 there were few honors classes and advanced placement classes.

6. Since 1960, there have been 1,837 gifted high school students enrolled in the special college program of the Chicago City Junior College . In 1960 there were only 160 students; in 1963, there were 684 students enrolled in these college classes taught in high schools.

7. New curriculum guides in all subject areas have been constructed to meet varying needs of students; each guide at the high school level has curriculum suggestions designed for honors students. In addition some special guides for advanced placement classes in science have been issued; other advanced placement guides in English,

mathematics, and history are now in preparation.

8. To assist teachers and administrators in implementing curriculum changes, forty consultants in major curriculum areas provide assistance in improving staff skills by visitation, faculty conferences, and district or school workshops.

9. The assignment of non-quota foreign language teachers in twenty-seven elementary schools has made it possible, through articulation with the local high school, to provide a six-year language sequence for gifted students.

10. In 1961 class memberships in high school academic classes were lowered. Membership in English classes was reduced to twenty-five students per class, and memberships in other academic classes were lowered as well.

11. Effective September 1964, a city-wide weighted system of grade points will give additional recognition for enrollment by gifted students in honors, college level, or advanced placement classes in high schools.

12. In 1956, five honors classes enrolling 154 gifted students were first offered in summer school; in 1963 there were twenty honors classes with 531 academically able students enrolled in summer school.

13. In 1961 and 1962, noncredit broad fields seminars in English-history and science-mathematics with an enrollment of seventy-two highly gifted students were offered during the summer session. Similar seminars designed for highly gifted students were again offered in the 1964 summer session.

14. Since 1962, experiments in programmed learning in selected elementary schools and high schools have provided opportunities for enrichment through individualized study for able students.

15. Since 1960, foundation grants and scholarships for summer study have provided opportunities for more than 650 outstanding teachers to keep up with developments in their fields of specialization and thus to guide programs of study in their respective schools for gifted and talented students.

16. The Chicago Experimental Program in English, begun in 1961, has provided new approaches in the instruction of high school students in composition and reading in nine high schools. This program utilizes grouping of students, use of programmed materials, and theme readers.

17. In 1963, there were 405 elementary school science fairs, 50 high school science fairs, and 21 district science fairs. The all-city science fair in 1963 had 81 exhibits from elementary schools and

178 exhibits from high schools; in 1959 there were 69 exhibits from elementary schools and 145 exhibits from high schools. The Chicago science fair has grown to be the largest science fair conducted by one school system in the nation.

18. Since 1958, the annual kick-off science fair breakfast for science students and teachers followed by assemblies in all high schools addressed by men of science and industry has been motivating and stimulating to outstanding science students.

19. Supporters of the Chicago all-city science fair have continually grown in number. In 1963 there were 202 financial contributors representing Chicago business and industry. Through their assistance, a United States Savings Bond was awarded to each of the 252 student exhibitors in the all-city fair. All student exhibitors have an opportunity to compete for college scholarships available only to them through funds also supplied by the financial supporters of the fair.

20. Since 1958 recognition breakfasts for students enrolled in advanced placement classes and their parents have been held in each high school where these classes are taught.

21. Teachers are now certified by examination as specialists in art, music, home economics, and industrial arts for grades 7-12. This promotes greater flexibility in articulating elementary and high school organization and provides greater depth of learning for elementary students in seventh and eighth grades.

22. The encouragement of academic competition in mathematics and foreign languages for high school students by the Chicago City Junior College has motivated academically able students.

23. The resurgence of debate tournaments aided by growth of debate clubs in high schools and elementary schools has aided able students to develop critical thinking.

24. Motivational organizations for gifted and talented students in both elementary and high schools have expanded since 1954. They include the National Honor Society, Future Teachers of America, Future Nurses of America, and the Junior Engineering and Technical Society.

25. The continuous development program at a primary level provides flexibility for intra-and inter-class groups so that able students may progress at an accelerated pace. In the school year 1963-64, there are 220 schools utilizing this approach; there will be 371 in September 1964.

26. In 1962-63, the director and staff of the Academically Talented Project of the NEA conducted a full-day workshop with principals and counselors of each of the twenty-one school districts to

study new approaches to instruction for gifted and talented youth.

27. Under funds provided by the State of Illinois Special Study Project for Gifted Children, three experimental studies have been undertaken. The studies, initiated in 1961 and 1962, are as follows: (1) an evaluation of an experimental elementary school program for gifted children, (2) an evaluation of curriculum materials for the gifted, and (3) methods of fostering creativity in elementary schools. In addition, in 1964 the state of Illinois has provided funds for the establishment of gifted child demonstration centers in four elementary schools and one demonstration center in a high school.

28. Greater articulation between elementary and high schools in each district has permitted gifted elementary graduates with high achievement scores to place out in science, mathematics, modern languages, and English. There were no "place outs" in 1954; in 1963 there were approximately 3000 elementary graduates who placed out in high school.

29. In 1958 a total of 1,144 high school graduates received 1,558 scholarships and other forms of financial aid. In 1963, 1,544 graduates received 2,193 scholarships. The Illinois State Scholarship Commission awarded 813 scholarships to Chicago public high school graduates by examination in 1963.

30. To strengthen the program of pre-engineering and technical education, selective admission procedures have been introduced in the north and south section technical high schools.

31. For youth talented in instrumental or vocal music, each high school has an orchestra or band and a variety of choral groups. Many elementary schools have instrumental groups; all have choral groups. An all-city band and all-city choral group initiated in 1962 provide additional opportunity for those high school students especially gifted in music.

32. For youth talented in art, each of the twenty-one school districts holds an annual art fair. Thousands of school patrons have viewed these exhibits of child creativeness in painting, sculpture, and varied crafts.

33. An all-city anthology of creative writing, compiled from the best efforts in literature in the city schools, was first published in 1961. This has also served as a stimulus for individual high schools and districts to publish their own literary anthologies.

Chapter IX

A LOOK FORWARD

Impressive strides have been made by the Chicago public schools in developing an educational program geared to the needs of the talented and gifted since the surveys of 1957 and 1959. The policies and procedures spelled out in the initial report and the guiding principles listed in the second report have done much to establish the rationale for the Chicago program. Administrators and their staffs have studied these reports and have supported the recommendations in their instructional plans for the gifted.

The present survey indicates that a well-defined plan of education for the gifted has evolved in the Chicago public schools, that identification and selection procedures are broadly conceived and well-organized, that curriculum adaptation has taken place, that an improved, articulated administrative structure has facilitated the program, and that community and parental cooperation has been secured. Not only has this program been extended, but it has been expanded despite profound changes in the school population and available financial resources.

The constant search for quality in education is reflected by the many innovations in the Chicago public schools plan of education for the gifted. However, if quality education is to be maintained and further improvements made in the education of the gifted, then additional financial aid must be sought. The state of Illinois through its plan for program development for gifted children has partially recognized the need of aid to local school systems by allocating additional funds to schools. While Chicago public schools have received assistance through this program, the needs are great and will become even more demanding as more gifted children are served. Eventually, there must be more substantial aid from the state as well as federal sources if the following recommendations are to be fully implemented.

The City-Wide Program

With respect to the total program

1. Each school should continue to provide a suitable and carefully planned program of education for its gifted and talented students.

2. Each school program should continue to be planned to meet the needs and conditions of the individual school and community, and the program designed to challenge and motivate the gifted as well as elevate their aspirations.

3. Emphasis should continue to be given to the promotion of excellence in the academic areas of the curriculum, and increased emphasis should be given to the achievement of quality in all non-academic areas as well.

4. The present broad and inclusive program for the gifted which provides for the upper fifteen to twenty per cent of pupils in the Chicago public schools should be continued. A highly selective policy which would restrict the program from one to five per cent of the pupil enrollment would place too much dependence upon existing testing instruments for measuring potential and exclude many students.

5. Flexibility in scheduling students and staff should be the keynote of the program for the gifted. Improved instructional procedures and new educational technology preclude reliance upon rigid pupil ratios or standardized class sizes.

With respect to the services of the central office

1. A coordinator for the program of the gifted should be assigned on a full-time basis in the Department of Curriculum Development. His function would be to coordinate the various facets of the program, to compile salient information on the progress of the total program, and to assist schools in the initiation of new programs as well as the improvement of ongoing programs. The coordinator also would work with consultants in the various curriculum areas in regard to the program for the gifted.

2. Curriculum consultants should be increased in number at both the elementary and secondary levels to assist teachers and administrators in the schools. The number of consultants available to the schools should be expanded sufficiently to be assigned to the various districts and to provide sufficient numbers to serve as coordinators on a city-wide basis for such programs as the gifted, culturally disadvantaged, and NDEA III.

With respect to in-service education

Chicago Teachers Colleges should organize summer workshops for teachers interested in teaching the gifted. The summer high school honors classes and the special elementary schools are available to serve as observation centers and learning laboratories for teachers enrolled in these summer workshops.

The Program in the Elementary School

With respect to organization

1. Class size in the elementary schools should be reduced to a city-wide average of twenty-five in order to provide greater attention to pupil progress.

2. The continuous development program in the primary grades should be expanded to include all pupils in grades K-3 throughout the city. It should be extended in experimental form, including careful evaluation, to grades 4, 5, and 6 to allow further opportunity for individual progress by the gifted.

3. Flexibility in grouping and re-grouping by ability levels for instruction should be practiced in all elementary grades. The success of the special elementary summer school organization in providing enriched educational experiences for high ability pupils at each level should be noted in this respect.

4. Patterns of organization and staffing as developed in the special elementary summer schools should be introduced into the regular elementary schools as funds permit. Practices in grouping, reduction of class size, augmented staffing, enriched curriculum materials, ample educational equipment, and daily in-service education are among the features of the special elementary summer schools which enhance instruction for the gifted as well as for other pupils.

5. Upper grade centers which group pupils in grades 7 and 8 and which provide many special opportunities for the gifted through teacher specialists, laboratories, shops, and co-curricular activities should be extended to all districts. Future planning should curtail traditional K-8 schools so that all pupils in grades 7 and 8 might attend upper grade centers. In the interim departmentalization should be expanded to all grades 7 and 8 in K-8 schools. Departmentalization in these grades when accompanied by ability grouping, teacher specialization, and team teaching can promote more effective pupil learning and increased co-curricular pupil activities for the gifted.

With respect to instruction

1. Experimental procedures by teachers in guiding the gifted should be encouraged. Emphasis upon the stimulation of inquiry and productive thinking should be characteristic of academic classes for the gifted.

2. The Junior Great Books program now offered on a voluntary basis should be expanded and several of its basic features incorporated in the regular program of instruction for the gifted.

3. The use of programmed materials and machines offering individualized instruction in academic areas should continue to be used and evaluated in programs for the gifted.

4. Team teaching should continue to be utilized and its use expanded to offer large group instruction as well as small group seminars for gifted children. Forty-three elementary schools report team teaching as an integral part of their program of education for the gifted.

5. Foreign language instruction should be expanded in grades 7 and 8 as part of the sequential six-year foreign language sequence. This expansion should apply only to those schools where the services of a non-quota foreign language teacher are available.

6. Language laboratories should be established in those upper grade centers offering instruction in foreign language. At present, there are only two language laboratories available in the upper grade centers.

7. Demonstration centers for the gifted which have been organized to display effective teaching practices and the use of new learning materials should be extended.

8. Instrumental music should be taught in grades 7 and 8 in elementary schools so that students with talent and ability may begin formal study of a musical instrument prior to high school entrance. The beginnings made in this field in some upper grade centers have proved their value.

With respect to identification and selection

1. Identification of the gifted child, now largely made at entrance to first grade, to the extent possible should be made at the time of the child's initial entrance into school so that long-range planning and carefully tailored programs may be instituted for him.

2. Teacher observation, standardized test results, pupil interests, and pupil performance should continue to be among the criteria employed to place the gifted child into academically able groups. Flexibility should be characteristic of placement so that pupils who are "late starters" may be placed when they have indicated their potential.

3. Special office records of master lists of gifted pupils should continue to be kept on file in the school office where they may

be reviewed by the principal, adjustment teacher, and/or classroom teacher. These records should form part of the anecdotal materials available for the gifted pupils' educational plans.

4. Psychological services should be increased for further identification of the gifted especially in disadvantaged areas where disadvantaged environment or personality factors may reduce the validity of group tests.

5. Motivation of the gifted should be a joint venture of the home and school. Parents should continue to be apprised early of the potential of their child, interviewed, and encouraged to plan for the child's long-range educational future. The school should furnish those experiences and counseling which will further motivate the gifted child and his parents to plan for his future.

With respect to staff

1. The number of adjustment teachers and counselors should be increased to provide improved and intensive counseling and guidance services for the gifted.

2. Certificates for teachers of academic subjects should be extended downward to include grades 7 and 8 in addition to grades 9 through 12. This would promote a greater depth of preparation for teachers in grades 7 and 8 and in the upper grade centers which is essential to quality education for the gifted. A precedent for this change has been established by certificates in grades 7-12 for teachers of art, music, home economics, and industrial arts.

3. Consideration should be given to a new ratio as the basis for teacher-librarian assignment which would take into consideration the expanded role of the library as the instructional materials center. It is recognized that the library is indispensable to the program for the gifted and that the teacher-librarian assumes a leading position in the program for the gifted in each school.

4. The teacher-pupil ratio in upper grade centers and in elementary schools with heavy enrollments in grades 7 and 8 should be such that special teachers in science, foreign language, and instrumental music are available as well as a class size of twenty-five. Such teachers may provide stimulus and motivation to programs of depth in science, foreign language, and instrumental music at these levels.

The Program in the High School

Features of programs for gifted students, successful and well-established in some high schools, should be introduced or emphasized in other high schools of our city.

With respect to motivation

1. The will to achieve is strongly affected by the influences surrounding the student. Securing the interest and cooperation of the parent is often the important first step in serving a gifted student. Early counselor-parent-student conferences point up latent talent, as well as the range of post-school opportunities available. These include special work-training programs, scholarships, and student loans.

2. Similarly, motivation is related to a desire for success. In many schools special-interest groups are addressed by community specialists who are invited to speak on opportunities in their vocations and about the satisfactions met in their everyday activities. Concomitantly, the school community is systematically informed about developments in the local program for gifted students.

3. Motivation often stems from a desire for new experience or novelty in expressing experience. One school audio-visual center features instructional aids designed by gifted students; an example is a series of overlays for use with the overhead projector in the biology laboratory.

4. Motivation can arise from acceptance, from recognition by those whom the student esteems. Honoring of academic achievement and deliberate use of extrinsic rewards will activate many able students:

   featuring of national honorary groups--National Honor Society, Quill and Scroll
   establishment of local honorary groups
   recognition at assemblies with parents invited
   presentation of awards insignia
   publication of honor rolls
   encouragement of expressional contests
   exhibits of student productions
   newspaper notices of achievement
   special dinners sponsored by parents' clubs
   outstanding students as luncheon guests of community organizations.

5. Systematic interviews for counseling purposes, with follow-up conferences with parents or teachers, at the first sign of a learning lag or personality problem is routine for the alert counselor of the gifted student.

With respect to learning achievement

1. A coordinator for the program for the gifted is appointed, generally an assistant principal. Under the direction of the principal, the coordinator aids the counselors, chairmen of departments, and teachers in counseling and placing gifted students.

2. The services of supervisors of art, music,and other special subjects are enlisted to aid in the identification and continuous guidance of students of marked talent. These students are encouraged to participate in the elective programs offered.

3. The "100" program is made to serve two purposes: identification of the most academically able students and placement upon the total staff of responsibility for their particular guidance and instruction.

4. Qualified students study biology in ninth grade, thus making possible a second-level course in twelfth grade in biology, physics, or chemistry, and thus a four-year laboratory science program.

5. Students demonstrating competence in a foreign language are urged to complete a six-year sequence in a language.

6. School-wide emphasis is placed on opportunity for independent investigation and study, for execution of individual projects.

Many features of current provisions for gifted students in the high school could be advantageously expanded when funds are available.

With respect to physical facilities

1. Plans for new school buildings should include team teaching suites--a large assembly room with adjoining small seminar rooms. Remodeling of old buildings should provide increased flexibility in classroom space and additional conference rooms.

2. Every high school should have departmental offices, so that teachers may confer with students. The offices should have suitable office equipment including duplicating machines and appropriate resource materials.

3. School libraries should feature adjoining classrooms for library instruction, individual study carrels, and increased provision for viewing and listening activities.

4. Planning for future library facilities should allow seating of up to twenty-five per cent of expected school enrollment.

5. Language laboratories have been successfully tried in twelve schools. In order to improve the foreign language program, such laboratories should become standard equipment in all high schools providing instruction in foreign language.

With respect to staff

1. The chairman of each department bears heavy responsibility for successful identification and programming of gifted students. Consequently, the chairman should be relieved of one class and be duly compensated for leadership exerted.

2. Teachers assigned to advanced placement classes should have a reduction of teaching load. Because of the need for extensive preparation of learning materials and for individual guidance of gifted students, the teaching load in academic subjects should be limited to four classes; in laboratory subjects the load should be three classes; and, in both cases, class size should not exceed twenty.

3. The Chicago Experimental English Program has demonstrated the merit of using theme readers to assist teachers of English. The services of qualified theme readers should be extended to all high schools.

4. A program for the gifted requires much preparation and duplication of learning materials such as syllabi, bibliographies, resource units. Additional clerical assistance should be provided. At least one clerk should be assigned to each of the major departments in each high school.

5. Reduction of the present student-counselor ratio would make possible desirable individual counseling for the able and talented students.

6. In-service education of teachers should be expanded, including a series of summer workshops in the content fields.

7. District round table meetings held periodically would serve to stimulate teachers of the gifted.

With respect to the program of studies

1. Every high school should offer honors classes in as many subjects as possible, with membership limited to the most able or markedly talented students.

2. Advanced placement or college level instruction in major subjects should be available to gifted students in every high school.

3. Under proper guidance, gifted students should be permitted to study five major subjects each year.

4. Team teaching should be encouraged in various learning areas in order to utilize teacher competencies and provide a high level of stimulation and enrichment to the superior student.

5. The library in each school is properly the center for resource materials and for much of the student activity in any program for the gifted. The library should be open one-half hour before the first class and open one-half hour after the last class. Serious consideration, also, should be given to opening libraries on Saturdays.

6. Increased provision should be made for the acquisition of filmstrips, disc and tape recordings, viewers, projectors, microreaders, and microfilmed issues of periodicals. Book collections should be augmented from approved listings of the central office.

7. Qualified students should continue to be encouraged to elect algebra in eighth grade; provision for their instruction should be expanded.

8. Curricular instruction must be the chief resource of the program, but scheduling should be flexible enough to allow some independent study by gifted students.

9. Teachers should be afforded opportunity to tape record special lectures so that gifted students may listen to them, individually, in the library.

10. Expansion of the use of closed circuit television should be considered in the interest of the enrichment of learning experiences.

The Program in the District

With respect to district program

1. The district superintendent should continue to give leadership to principals and teachers in the continuing study and improvement of the program of education for the gifted and talented in the schools of his district.

2. In-service training for the improvement of education for the gifted at the district level should provide for joint principal-teacher study groups, workshops for the study of new methodology, and teacher institutes utilizing the services of curriculum consultants, supervisors, and specialist teachers.

3. Articulation practices between elementary schools and high schools should be extended to include "place out" in all major curriculum areas. Through district coordination, place out practices in general science, mathematics, and foreign language have increased; they should be extended to English and social studies as well.

4. Opportunities for gifted students in the schools of each district to meet together for joint projects should be encouraged; a joint breakfast meeting attended by Great Books discussion groups from two schools in a district is an example of such a project.

5. Community resources available for use in the instruction of the gifted should be identified and listed by a district committee. This list of persons, places, and institutions should be evaluated periodically for relevance to the program.

6. A district anthology of creative writing and art, representative of the best efforts of gifted pupils of all schools, should be published periodically by each district.

Education Extension

With respect to the summer session

1. Honors classes in major academic subjects have been offered in some summer schools. This program of quality education should be extended.

2. Broad fields non-credit seminar classes in English-history and mathematics-science should be continued and extended.

3. The French Day House has been an exciting innovation in the 1964 summer session. A similar day house of the German and Spanish languages should be organized in future summer sessions.

4. The all-city art workshop should be continued and expanded to include two more art workshops.

5. A summer dramatics class, patterned after the special Shakespeare Festival class, should be a regular offering of the summer session.

6. Experimental classes, not ordinarily taught during the regular school year, should be offered during the summer session. Such

courses as the history of east Asia, anthropology, descriptive astronomy, or earth science might be considered as experimental classes.

7. Special summer schools (grades K-6) should be continued and expanded so that their enriched quality program may be available to more pupils of high potential.

8. Regular elementary summer school classes in grades 7 and 8 should be patterned after the special elementary summer school in organization and staffing. Provisions should be made for gifted pupils in these grades to participate in the enriched and cultural experiences typified by the special summer schools.

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